

March 8 , 2011

Contact person: Asbjorn Moseidjord

**Proposal to the UEPC to Create a Concentration in
Sustainability Studies
under the B.A. Major in Economics**

Approved by the Economics Department: March 10, 2011.

Proposed Implementation: Academic Year 2011/12

1. History of this proposal

This is a proposal for a concentration within the economics major requiring the students to take about one-third of their courses in the School of Science and the School of Liberal Arts.

An early proposal for a course structure for the concentration was circulated to members of the economics department in May 2010, and then discussed at a department meeting in September. It was also reviewed and received very helpful comments from Bill Perkins, Director of the SMC Environmental and Earth Science Programs. On this basis, a new course structure was developed in the fall and circulated informally. A draft proposal was developed in February 2011 and circulated to the Economics Department members; the SEBA Associate Dean, Dean, and chair of the SEBA curriculum committee; and Bill Perkins (with a request to forward it to the members of the Environmental and Earth Science Steering Committee.)

February 21: Review by the EES Steering Committee. This review showed broad support for the concentration. Several specific suggestions and comments were incorporated into the current version.

February 23: Review by the Economics Department. Further amendments were made and a draft was unanimously approved.

The draft was then circulated to the chairs of affected departments and programs in the School of Science and the School of Liberal Arts; discussed extensively with Associate SEBA Dean Larisa Genin on February 24; and the SEBA curriculum committee reviewed the draft in a meeting on March 8.

All the revisions proposed by Associate Dean Genin and the SEBA curriculum committee have been integrated into the current proposal. In effect, there appears to be no outstanding issue or reservations with any of the parties consulted in this process.

On March 8, the proposal was sent to SEBA Dean Zhan Lee.

Expected process from here:

March 10: Final approval by the Economics Department and forwarding of the proposal to the UEPC

Receive statement from SEBA Dean Lee.

March 14: Review by the UEPC

March 24: Review by the Academic Senate

Late March: Develop catalog language

Fall 2011: Implementation

2. Motivation

The proposed concentration addresses directly the College Academic Blueprint by establishing an academic program in environmental sustainability.¹ It furthermore supports one of the new foci of the School of Economics and Business Administration. The concentration aims to educate students for effective participation in the rapidly growing portion of society – and the economy in particular - that addresses sustainability issues². The term sustainability is used here in the usual sense of being an umbrella concept that aims to bring together various fields of study to jointly address issues of economic well-being, ecosystem stability, and social justice. To be meaningful, such a concentration must therefore encompass all three areas.

¹ See Direction 3, Goal A: tactic 3 at <http://www.stmarys-ca.edu/about-smc/provost/academic-blueprint-plan.html>

² For an overview of the growth of the portion of the economy that addresses important sustainability issues, see for example http://www.coecon.com/Reports/GREEN/ManyShadesofGreen_1210.pdf

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3. Structure

The course requirements for the proposed concentration with explanatory annotation are shown in the exhibit on the previous page.

There will be a total of 15.25 required classes – placing a major with this concentration within the norm for Saint Mary’s. The relatively heavy lower division requirements (6 courses plus one lab) is necessary to build a foundation in science such that students can take relevant upper division science courses, specifically those offered by the Environmental and Earth Science program. On the other hand, this set of lower division courses should allow the students to satisfy coming core curriculum learning goals and thus be straightforward for students to complete.

The proposed concentration takes advantage of the recent re-structuring of the Environmental Science and Studies programs within the School of Science and the clarification of course pre-requisites within that school. The results of the restructuring make it straightforward to provide the sustainability concentration under the B.A. in economics with an appropriate foundation in science courses. The students are also asked to integrate into their concentration the approach to sustainability in one or two other fields of knowledge – labeled “Other Perspectives” in the exhibit. In doing so, students are given a wide area of choice to find two courses, mostly among courses in the School of Liberal Arts. Students are expected to use these two classes to explore social justice issues within a sustainability framework.

The concentration thus provides a framework for a multi-disciplinary approach to studying sustainability, yet with a very clear and strong basis in economics. It combines a set of core economic theory and application courses with a foundational background in science while also exposing students to other perspectives that are expected to have a stronger emphasis on social justice.

The combination of economics, science, and humanities courses should provide a very strong liberal arts background that will help students meet their own career needs as well as the broad needs of society. These needs change rapidly with new values and perspectives, new policies and new technologies. Grounded in the liberal arts, our students should be particularly well prepared to successfully cope with these changes.

4. Learning Goals

The current learning goals for the B.A. in economics are as follows:

1. Develop the ability to explain core economic terms, concepts and theories.
2. Demonstrate the ability to employ the “economic way of thinking”.

3. Apply economic theories and concepts to contemporary (e.g., income inequality) and historical issues, as well as formulation and analysis of policy
4. Ability to compare and contrast competing views within economics with a critical thinking perspective, an open mind, and a respect for diversity.

Naturally, all of these would also apply to the students choosing the proposed concentration. In addition, these students should satisfy a fifth learning goal:

5. Ability to integrate relevant concepts from economics, science and the humanities to address sustainability issues.

The concentration aims to cause integration of learning (number 5) through the following means:

- All majors pursuing the concentration should have the same advisor, who will meet with students early in their academic career to discuss their interests and assure a meaningful, integrated study program.
- All majors will be taking a capstone course where they will be required to complete a project that addresses sustainability issues.
- All majors will be required to complete a .25 unit course in which they reflect, in writing, on their program of study and the interrelationships of the various courses and subjects.

When it comes to assessment of learning outcomes, it is expected that outcomes relating to the first four goals will be assessed as part of the general assessment cycle for the BA. Outcomes assessment relating the fifth goal needs to be integrated with the capstone experience.

5. What makes the proposed degree program an economics major?

Course Structure:

The regular B.A. in economics has a total of 15 courses, whereas the proposed concentration has 15.25 required courses.

How are the two different? The concentration basically (1) replaces four upper division economics application courses with four science courses, two at the lower division level and two at the upper division level and (2) focuses upper division application courses and the two courses taken outside of economics and science on sustainability themes.

How are they similar? The common core is the theory courses at the lower and upper division levels, the quantitative methods classes (math and statistics) and the capstone experience. Outside this core, B.A. economics majors inside and outside the concentration may also – if they so choose - share two upper division economics

application courses and two courses from the School of Liberal Arts (referred to as Allied Disciplines in the description of the B.A. in Economics.)

In conclusion, the concentration narrows down the focus and choices within the B.A. economics major - which is what one expects from a *concentration* in the first place.

Learning Goals:

The concentration includes all the four learning goals of the regular B.A. in economics and adds a fifth learning goal.

6. Student Enrollment

The number of declared economics majors has fluctuated between 24 and 44 within the past decade, split about equally between the B.A. and the B.S. degrees. It is difficult to forecast what the impact of the proposed concentration will be on the number of majors and what the consequences are for class enrollments. The motivation for the program, as stated, is that it addresses increased social attention to sustainability issues and a corresponding rapidly growing portion of the economy. These macro-circumstances are not expected to change. Furthermore, students have also informally expressed interest in such a degree program. Most likely, the number of students choosing the concentration will start out modestly and grow over time as the degree program improves and as it develops a reputation among students. In the beginning, students coming into the program will likely come from other programs on campus, in particular, the regular B.A. in economics.

Hopefully, the concentration will become a good marketing tool for the Economics Department and, in the longer run, not only recruit students from other programs, but also help attract students to Saint Mary's College.

A possible risk to enrollments in economics classes is that regular B.A. students choose the concentration, which has fewer upper division application course requirements. In effect, this could cause a loss of enrollment in upper division application courses, but this effect - if relevant - should be very small and temporary.

The expected, modest start for this program is not a problem from a resource allocation point of view since this proposal does not come with request for added resources - as discussed in section 8 below.

The concentration may have spillover benefits for studies of sustainability issues generally at SMC. By drawing in students from economics, courses in the School of Science and Liberal Arts may experience higher enrollments and a more diverse student background. Furthermore, the proposed course structure is modular and could be imitated by other departments wanting a concentration in sustainability issues. This can be done by removing the economics core and replacing it with the

core of some other field, politics in particular comes to mind. This could lead to further enrollment growth and expansion of sustainability related courses and programs.

7. Comparison to Other Colleges.

The Economics Department's 2008 Review contains a survey of economics degree programs offered by comparison institutions. The survey includes economics majors with an "emphasis", "concentration" and the like. The universities and colleges in the survey consist of the U.C. system, the CA state system (selected) as well as private colleges (Loyola, Santa Clara, USF, and USD). None of these have programs labeled with the term "sustainability" or "sustainable". Degree programs offered by Berkeley, Davis and Chico carry the label "environmental".

.An informal web search combining terms like "econ" "major" and "sustainability" reveals a variety of approaches. Most conspicuously, there are well established programs at large institutions offering students a large degree of choice when it comes to pursuing their interests. In this larger perspective, the proposed concentration is a modest attempt at bridging economics, science and the humanities in a liberal arts context.

Santa Clara University – perhaps our closest competitor - has created an interesting structure whereby the notion of sustainability has been explicitly built into the core curriculum as a "core curriculum pathway". This approach is different from the one taken in the proposed concentration in that the latter is firmly grounded in the economics courses and is a degree program under the Economics Department.³

The label "sustainability" is preferred for the proposed program because the fundamental concept (bridging economics, science, and the humanities) corresponds to the elements in the common understanding of the term "sustainability".

8. Resource Needs

Except for the .25 unit capstone course, the concentration builds on courses already offered. The degree to which faculty time needs to be set aside and compensated to oversee this .25 unit course depends on how many students enroll in the concentration. Compensation is expected to be resolved in a manner consistent with policies otherwise within the School and the College.

³ The Santa Clara approach can be found at:
<http://www.scu.edu/sustainability/education/curriculum.cfm>

A faculty member will be needed to serve as the advisor for the students within the concentration and generally serve as the focal point for the students; organize activities; oversee the implementation of the concentration; maintain contacts with related programs and departments; and propose improvements. As the number of students in the concentration increase, this advisor should be relieved of other advisees to focus solely on majors within the concentration in order to enhance their academic experiences.

An important part of the role of the advisor will also be to assure that courses that satisfy the requirements for the concentration are taught on a schedule such that they fit the students' schedule. To accomplish this, the advisor needs to work with the economics department chair as well as other with other department chairs.

On the following page is an excerpt from the Economics Department website showing requirements for the regular B.A. economics major

Appendix:

Major Requirements for Bachelor of Arts Degree

Lower Division

Principles of Micro/Macro-Economics (Economics [3](#), [4](#))
Statistics (may be satisfied by [BusAd 40](#), Politics 100, [Mathematics 4](#) or [Psychology 103](#))
One of the following: Mathematics [3](#), [27](#), or any upper division mathematics course except Mathematics 101

Upper Division

Economics [102](#), [105](#), [106](#), and [120](#)
5 additional full credit upper division courses in economics (not to include [Economics 199](#))

For exposure to the breadth of economics, the department strongly recommends that Bachelor of Arts majors choose their 5 elective economics courses to include 1 from each of the 4 groups listed above. (I've never understood what these groups are.) Majors desiring a more concentrated focus or planning a career in law should consult with an economics advisor for assistance in selecting elective courses in economics and the allied disciplines. Bachelor of Arts majors who have completed the appropriate prerequisites in math and statistics may include [Economics 141- 142](#) among their upper division economics elective courses. Two courses from among the following allied disciplines:

Anthro/Soc: [114](#), 120, [123](#), 124, [130](#), 134

History: [104](#), [105](#), [117](#), [134](#), [136](#), [137](#), [151](#), [154](#), [161](#), [162](#), [172](#)

Philosophy: 108, 113, 115, 116

Politics: [101](#), [104](#), [106](#), [107](#), [110](#), [111](#), [114](#), [120](#), [130](#), [135](#)

Waivers of prerequisites or class standing require the approval of the department chairperson. Some upper division courses (including the required courses 120, 141, and 142), may be offered in alternate years only. The student must determine, prior to his/her registration for the junior year, in a conference with his/her advisor, which courses are currently being given in alternate years so that he/she will have an opportunity to complete all required courses in a timely manner.