PROPOSAL TO OFFER A NEW ACADEMIC PROGRAM/ MAJOR IN FALL 2004
(LONG FORM)

Proposed Name of Degree:	Bachelor of Arts in Economics
Options/ Emphases in the Degree:	General Economics; Environmental Resource Economics; International Economics; Managerial Economics; Quantitative Economics
Faculty Proposing New Program:	Dennis Muraoka, PhD Paul Rivera, PhD Ashish Vaidya, PhD

Review and Approval:

1. Curriculum Committee Approval:

Curriculum Chair: _____ Date: _____

2. Academic Senate Approval:

Chair, Academic Senate: _____ Date: _____

3. Administration Approval:

President (or designee): _____ Date: _____

PROCEDURE FOR SUBMITTING PROPOSALS FOR NEW PROGRAMS

A campus, in accordance with its approved academic master plan, submits detailed proposals for new degree major programs to the Office of Academic Program Planning for review and approval in the academic year preceding projected implementation. Approval of any degree major program is subject to campus assurances that financial support, qualified faculty, physical facilities and library holdings sufficient to establish and maintain the program will be available within current budgetary support levels. The proposal must follow the format below, and four copies should be sent to Academic Program Planning, Office of the Chancellor.

1. Definition of the Proposed Degree Major Program

a. Name of the campus submitting the request, the full and exact designation (degree terminology) for the proposed degree major program, and academic year of intended implementation.

California State University Channel Islands
Bachelor of Arts in Economics
Fall 2004

b. Name of the department, departments, division or other unit of the campus that would offer the proposed degree major program. Identify the unit that will have primary responsibility.

Business and Economics Program

c. Name, title, and rank of the individual(s) primarily responsible for drafting the proposed degree major program.

Dennis Muraoka, PhD, Professor of Economics
Paul Rivera, PhD, Assistant Professor of Economics
Ashish Vaidya, PhD, Professor of Economics

d. Objectives of the proposed degree major program.

Students who successfully complete the Bachelor of Arts in Economics will be able to:

1. Define the concept of scarcity and explain the role of economics in efficient resource use.
2. Identify situations in which economic analysis is applicable, as well as those outside the realm of economic thought.
3. Address issues and problems from not only the economic perspective, but also from other perspectives as appropriate to the situation.
4. Identify the assumptions of economic theory and explain the consequences of violating those assumptions.
5. Apply the techniques of marginalist decision-making in the definition and solution of economic problems.
6. Explain the determinants of aggregate economic activity and their implications for both private and public sector decisions.
7. Explain the interactions between consumers and firms in a market-based economy.
8. Identify, locate, evaluate, synthesize and present current research and information on economic issues.
9. Formulate testable hypotheses concerning economic problems and issues.
10. Collect, organize, analyze, interpret and present quantitative and qualitative data.

11. Use current, technological tools in the collection, organization, analysis and interpretation of data.
12. Communicate in written and oral forms with interested citizens and professionals on economic issues.

This curriculum prepares students for careers and for graduate study in such areas as economics, business, management, law, public administration and education.

e. Total number of units required for the major. List of all courses, by catalog number, title, and units of credit, to be specifically required for a major under the proposed degree program. Identify those new courses that are (1) needed to initiate the program and (2) needed during the first two years after implementation ~~(Complete Table 1)~~. Include proposed catalog descriptions of all new courses.

TOTAL NUMBER OF UNITS REQUIRED FOR ECONOMICS MAJOR

The proposed major consists of 39 to 45 units as shown in the table below.

Lower Division Requirements (9-10 units):

Introductory Economics Requirement
ECON 110 Principles of Microeconomics (3)
ECON 111 Principles of Macroeconomics (3)

Calculus Requirement
Either
MATH 140 Calculus for Business Applications (3), or
MATH 150 Calculus I (4)*

Upper Division Requirements (15-16 units):

Intermediate Economic Theory Requirement
ECON 310 Intermediate Microeconomics (3)
ECON 311 Intermediate Macroeconomics (3)

Statistics Requirement
Either
MATH 329 Statistics for Business and Economics (3), or
MATH 352 Probability and Statistics (3)

Econometrics Requirement
Either
ECON 486 Introduction to Econometrics (3), or
ECON 488 Applied Managerial Econometrics (4)

Capstone Requirement
ECON 499 Capstone (3)

* MATH 150 and MATH 352 are required for Quantitative Economics Emphasis.

Required Emphasis (15-20 units):

General Economics (15 units)
Environmental Resource Economics (15 units)
International Economics (20 units)
Managerial Economics (15 units)
Quantitative Economics (19 units)

For a detailed description of each of the emphases see 1g.

TOTAL NUMBER OF UNITS REQUIRED FOR GRADUATION

The proposed economics major consists of 39 to 45 units. General education at CSUCI consists of 48 units. In addition, there are 6 units required in American history and government (Title V). Thus, the economics major, general education, and Title V requirements can be met with 93-99 units. This computation assumes no double-counting of courses within the major and general education. It is in fact possible to complete 10 units in general education courses in categories B-1, B-3, C-3 and D that will also satisfy major requirements. Taking full advantage of the opportunities to double-count courses, the economics major can be completed with 83-89 units.

A total of 120 units are required for graduation. Thus, economics majors will have a minimum of 21 free elective units and possibly as many as 37 free elective units depending on the emphasis selected and assuming full double-counting of major requirements and general education.

I. Economics Major	39-45 units
II. General Education	48 units
III. Title V	6 units
IV. Free Electives	21-27 units
Total	**120 units**

Economics Major Courses Fulfilling GE Category Requirements

A-1 Writing Communication
No applicable course from Economics Major
A-2 Oral Communication
No applicable course from Economics Major
A-3 Critical Thinking
No applicable course from Economics Major

B-1 Physical Sciences
BUS/CHEM/ECON 341 Drug Discovery and Development
B-2 Life Sciences
ESRM 100 Introduction to Environmental Science and Resource Management
B-3 Mathematics
MATH 140 Calculus for Business & Economics (or)
MATH 150 Calculus I
MATH 329 Statistics for Business and Economics
B-4 Computers and Information Technology
No applicable courses from Economics Major.

C-1 Fine Arts
No applicable course from Economics Major
C-2 Literature
BUS/ECON 340, ENGL 330 Business and Economics in the American Literature
C-3 Language/Cultures
SPAN 101 Elementary Spanish I
SPAN 102 Elementary Spanish II

D Social Studies

ECON/FIN 343 Capital Theory
BUS/CHEM/ECON 341 Drug Discovery and Development
BUS/ECON/HIST 349 History of Business & Economics in North America

E Personal Growth

No applicable course from Economics Major

COURSE DESCRIPTIONS FOR REQUIRED COURSES

Economics Courses and Courses Outside of Economics

ECONOMICS COURSES

ECON 110. Principles of Microeconomics (3).
The application of economic reasoning to the decisions of consumers and producers. Topics include opportunity cost, resource allocation, the price system, the organization of industry, market failures, distribution of income, public sector economics.
Gen Ed: D
(A required lower division course in major.)

ECON 111. Principles of Macroeconomics (3).
Study of the workings of the economy. Topics include national income accounting, business cycles, employment and unemployment, inflation, economic growth, financial institutions, fiscal and monetary policy, international trade.
Gen Ed: D
(A required lower division course in major.)

ECON 310. Intermediate Microeconomics (3).
Prerequisites: ECON 110, 111 and either MATH 140 or 150. Economic analysis of the decisions of consumers and producers. Emphasis on the theory of consumer behavior, the theory of the firm, price and output determination in various market structures, factor markets and externalitites. (A required upper division course in major.)

ECON 311. Intermediate Macroeconomics (3).
Prerequisites: ECON 110, 111 and either MATH 140 or 150. Determinants of levels of national income, employment, and price levels. Analysis of secular and cyclical changes in economic activity, and the effects of monetary and fiscal policies on these changes. (A required upper division course in major.)

ECON 486. Introduction to Econometrics (3).
Prerequisites: ECON 310 or 329, 311, MATH 340. Application of mathematical and statistical methods to economic data. Estimation of economic relationships using regression analysis, hypothesis testing, and forecasting. (Either ECON 486 or 488 is required.)

ECON 488. Applied Managerial Econometrics (4)
Prerequisites: ECON 310 or 329, 362; MATH 150, BIOL/MATH/PSY 202 or MATH 329 or 352. Emphasis on the collection and manipulation of economic data, and application of econometric methods to business and resource management issues. Development of testable hypotheses, applications of estimation techniques and interpretation of regression results. Use of econometric software applications to estimate statistical relations. (Either ECON 486 or 488 is required.)

ECON 499. Economics Capstone (3).
Prerequisites: Required upper division courses in economics major (may be taken concurrently) and senior standing. In the capstone course, economics majors will analyze an economic issue stemming from their emphasis using the theoretical and empirical tools developed in the required major courses. The economic issue may be drawn from an internship or service learning placement. The course will culminate with a senior paper that is presented in class. (An upper division required course in the major. This is a new course. It will be offered in the spring semester of the second year following the implementation of the economics major.)

COURSES OUTSIDE OF ECONOMICS

MATH 140. Calculus for Business & Economics (3)
An integrated course in analytic geometry and calculus in the context of business and economics applications. Functions, limits, derivatives, integrals and mathematical modeling are used in problem solving and decision-making context. (Either MATH 140 or 150 is required.)

MATH 150. Calculus I (4)
A course in analytic geometry and calculus. Elementary and transcendental functions are introduced, their properties studied; limits, derivatives, integrals and mathematical modeling used in problem-solving in sciences.

MATH 329. Statistics for Business & Economics (3)
Prerequisite: MATH 140 or 150. Introduction to modern statistical methods used in business analysis and economics, especially in experimental data evaluation and decision-making contexts. Topics include: sampling, probability, various distributions, correlation and regression, statistical inferences, hypothesis testing, problem solving and the consequences to underlying economical systems. Includes a project in the community. (Either MATH 329 or 352 is required. MATH 352 is required for the quantitative economics emphasis.)

MATH 352. Probability and Statistics (3)
Prerequisite: MATH 151. Topics include: data gathering, analysis and display. Validity of sampling methods and statistical conclusions. Probability, conditional probability, Bayes' Theorem, discrete and continuous random variables and their distributions , moments, bivariate distributions, transformations of random variables, central and other limit theorems. Bayes estimation, tests of hypotheses, nonparametric tests, decision theory. Modern computer software applications in statistics.

f. List of elective courses, by catalog number, title, and units of credit that can be used to satisfy requirements for the major. Identify those new courses that are (1) needed to initiate the program and (2) needed during the first two years after implementation ~~(Complete Table 1)~~. Include proposed catalog descriptions of all new courses.

COURSE DESCRIPTIONS FOR ELECTIVE COURSES
Economics Courses and Courses Outside of Economics

ECONOMICS COURSES

ECON 320. Money and Banking (3).
Prerequisites: ECON 110, 111 and either MATH 140 or 150. Nature and functions of money and its relation to prices; the monetary system of the United States; the functions of banks, bank credit, foreign exchange and monetary control. The impact of monetary policy on economic activity. (An upper division elective course. Either ECON 320 or 329 is required for managerial economics emphasis.)

ECON 329. Managerial Economics (3).
Prerequisites: ECON 110, 111 and either MATH 140 or 150. Development of the tools of marginalist analysis and their application to managerial decisions and planning. Topics include demand analysis, production and cost, pricing and output decisions under different market structures. Product and factor markets will be analyzed. (An upper

division elective course. Either ECON 320 or 329 is required for managerial economics emphasis.)

ECON 340. Business and Economics in American Literature (3). (cross-listed as BUS 340 and ENGL 330)
Explores the ways in which business and economics have been represented in American literature. Employs critical methodologies from the fields of Business, Economics, and Literary studies.
Gen Ed: C2, D and Interdisciplinary
(An upper division general education course.)

ECON 341. Drug Discovery and Development (3). (cross-listed as BUS/CHEM 341)
How are drugs discovered? What determines the price for a drug? What is the difference between a generic and non-generic drug? These questions will be examined with an interdisciplinary approach. Topics to be covered may include the isolation of compounds from natural sources, the screening of compounds for biological activity, structure-activity relationships of drugs, computer-assisted drug design, combinatorial chemistry, bioinformatics, the FDA approval process for new drugs, and the economic and business aspects of pharmaceutical development. Three hours of lecture each week.
Gen Ed: B1, D and Interdisciplinary
(An upper division general education course.)

ECON 343. Capital Theory (3). (cross-listed as FIN 343)
Intertemporal choice and decision-making under uncertainty in our personal and financial lives. Topics include multiperiod consumption, multiperiod production, capital budgeting, modern portfolio theory and financial management.
Gen Ed: D and Interdisciplinary
(An upper division general education course.)

ECON 349. History of Business and Economics in North America. (3) (cross-listed as BUS/HIS T 349)
Examines the growth and development of economies of North America since colonial times. Addresses social, ethical, economic and management issues during the development of Canada, the United States, and Mexico. Analyzes the business principles underlying the growth and development of the economies.
Gen Ed: D and Interdisciplinary
(An upper division general education course.)

ECON 362. Environmental Economics (3).
Prerequisites: ECON 110 and 111. Economic analysis of environmental problems and policy. Market failures due to externalities, public goods, and common property resources will be examined. Private (market) and public (governmental) solutions to environmental problems are examined. (An upper division elective.)

ECON 370. The World Economy (3).
Prerequisites: ECON 110 or 300. Theory, practice, and institutions of the international economy. Topics include international trade and investment, balance of payments, foreign exchange rates, international institutions in the global economy, and international economic policy. (An upper division elective.)

ECON 415. Industrial Organization (3).

Prerequisite: ECON 310 or 329. A theoretical and empirical examination of the structure, conduct and performance of industries. (An upper division elective in the economics major. This is a new course. It will be offered in the spring semester of the second year following the implementation of the economics major, and then every other year thereafter.)

ECON 425. Labor Economics (3).
Prerequisite: ECON 310 or 329. An examination of the employment of labor as a factor of production. Topics include employment, wage rates, unions and collective bargaining, and labor legislation. (An upper division elective in the economics major. This is a new course. It will be offered in the spring semester of the third year following the implementation of the economics major, and then every other year thereafter.)

ECON 450. Public Sector Economics (3).
Prerequisite: ECON 310 or 329. The economic role of government with an emphasis on the allocation and distribution effects of government expenditures and taxation. (An upper division elective in the economics major. This is a new course. It will be offered in the fall semester of the second year following the implementation of the economics major, and then every other year thereafter.)

ECON 455. Urban and Regional Economics (3).
Prerequisite: ECON 310 or 329. Economic analysis of urban and regional problems including the formation of cities, urban finance and services, growth, land use, transportation, income distribution, pollution, congestion, and law enforcement. (An upper division elective in the economics major. This is a new course. It will be offered in the fall semester of the third year following the implementation of the economics major, and then every other year thereafter.)

ECON 464. Natural Resource Economics (3).
Prerequisite: ECON 310 or 329. Microeconomic and capital theory applied to problems of conserving and managing natural resources. Analysis of public policies affecting renewable and nonrenewable resources including price controls, taxation and leasing. Representative topics include: forestry, energy, water, and mineral economics. (An upper division elective.)

ECON 471. International Trade (3).
Prerequisites: ECON 310 or 329. The theory of international trade, effects of tariff and non-tariff barriers, and conduct of commercial policy. Topics include theories of comparative advantage, gains from trade, distribution effects of trade, international factor movements and trade restrictions, the political economy of trade and industrial policy. (An upper division elective.)

ECON 472. International Macroeconomics (3).
Prerequisites: ECON 311 or 320. Macroeconomic analysis of the open economy, the impact of stabilization policies in a global economy, the role of the balance of payments, and the international monetary system. Topics include balance of payment accounts, spot-forward exchange rates, interest rate arbitrage, purchasing-power parity, exchange rate determination and macroeconomic policy in an open economy. (An upper division elective.)

ECON 473. Economic Development (3).

Prerequisites: ECON 310 or 329. Economic underdevelopment and its causes from historical, institutional and structural perspectives. Theories and patterns of growth and development, and the role of government, trade, education. Regional focus may vary by semester. (An upper division elective in the economics major. This is a new course. It will be offered in the fall semester of the second year following the implementation of the economics major, and then every other year thereafter.)

ECON 480. Topics in Environmental and Natural Resource Economics (3).
Prerequisites: ECON 362 or 464 or consent of the instructor. Application of economic analysis to topics in environmental and natural resource economics. Representative topics include: energy problems and policies, the measurement of market and non-market costs and benefits, endangered species management. Repeatable by topic. (An upper division elective.)

ECON 490. Special Topics (3).
Prerequisite: Consent of instructor. In-depth analysis of current topic in economics. Topics vary each semester. Repeatable by topic. (An upper division elective.)

COURSES OUTSIDE OF ECONOMICS

ACCT 210. Financial Accounting (3)
Introduction to accounting principles: accumulation, measurement, and valuation of accounting data. Topics include internal controls, financial statement analysis and interpretation, and use of spreadsheets in accounting applications. (A required lower division course in the general economics and managerial economics emphases.)

BUS 320. Business Operations (3)
Prerequisites: MATH 140 or 150. Exploration and application of quantitative techniques, systems analysis and operations analysis of business functions, with an emphasis on the optimization of process and operational efficiencies. A variety of management science methodologies will be applied to theoretical and real-world situations. (An upper division elective in the managerial economics and quantitative economics emphases.)

ESRM 100. Introduction to Environmental Science and Resource Management (3)
This course covers a broad spectrum of environmental science topics including: biogeochemical cycles, biological diversity, world food supply, effects of agricultural production on the environment, energy, water and air environments, and societies' impacts on the environment. Current environmental issues such as loss of biological diversity, global climate change, ozone depletion, and natural resource management will be discussed.
GenEd: B2, D
(A required course in the environmental resource economics emphasis.)

ESRM 329. Environmental Law and Policy (3)
Prerequisites: ESRM 100 or consent of the instructor. The purpose of this course is to introduce the fundamental concepts of environmental law and policy and familiarize students with the various types legal of mechanisms used to protect the environment. A practical grounding in the basic legal concepts central to environmental law and how laws have been applied at the local, state, national, and international level will be gained. Students will also explore the purpose and function of some of the larger environmental institutions and their relationships with the public, business, and the environmental community. (A required course in the environmental resource economics emphasis.)

ESRM 410. Environmental Impact Assessment (3)
Prerequisites: BIOL 330, ECON 362, ESRM 328 and 329. This course will introduce students to methods and procedures designed to assess and minimize human impacts on natural systems. Topics to be covered include the components of environmental impact reports and assessments, and the processes involved in preparation and approval. Also addressed will be the issues related to mitigating environmental impacts. (An upper division elective in the environmental resource economics emphasis.)

ESRM 462. Coastal and Marine Management (3)
Prerequisites: BIOL 330, ECON 362, ESRM 329. This course provides an introduction to physical and biological oceanography, threats to the marine environment, and various policies and programs which have been or are being developed to establish how humans manage coastal and marine environments. (An upper division elective in the environmental resource economics emphasis.)

ESRM 463. Water Resources Management (3)

Prerequisites: BIOL 330, ECON 362, ESRM 329. Water management principles focusing on irrigation and drainage, soil and water conservation, and watershed development. Topics to be covered include the hydrologic cycle; runoff; erosion control; soil-water-plant relationships; surface and subsurface drainage; surface, sprinkler, and micro irrigation; vegetated waterways and open channel flow; impoundments; wetlands; water quality and supply; water rights. (An upper division elective in the environmental resource economics emphasis.)

ESRM 464. Land Use Planning and Agricultural Management (3)
Prerequisites: BIOL 330, ECON 362, ESRM 329. This course will examine various approaches to land use planning at the municipal, county, state, national, and international level focusing on the role of land use planning in managing agricultural lands within and adjacent to urban areas. Students will use case studies from Ventura County and related areas. (An upper division elective in the environmental resource economics emphasis.)

ESRM 482. Issues in Environmental Planning and Resource Management (3)
Prerequisites: BIOL 330, ECON 362, ESRM 329. Selected issues in resource development derived from current resource policy changes, or other emerging topics of interest. (An upper division elective in the environmental resource economics emphasis.)

ESRM 483. Issues in Global Resource Management (3)
Prerequisites: BIOL 330, ECON 362, ESRM 329. May be repeated for credit, with permission. Selected issues in global resource management. Topics may include climate change, ocean management, desertification, air pollution, ozone depletion, patterns of consumption, water pollution, water allocation, international policy or legislative instruments, or other topics as appropriate. (An upper division elective in the environmental resource economics emphasis.)

FIN 300. Business Finance (3)
Prerequisite: ACCT 210, ACCT 220, ECON 110, ECON 111, MATH 140 or 150. Principles of planning, procuring, controlling short term and long-term financial resources of business organizations. Topics include cash and capital budgeting, debt and equity markets, security evaluations, cost and structure of capital. (An upper division requirement in the managerial economics emphasis.)

MATH 140. Calculus for Business & Economics (3)
An integrated course in analytic geometry and calculus in the context of business and economics applications. Functions, limits, derivatives, integrals and mathematical modeling are used in problem solving and decision-making context. (Either MATH 140 or 150 are required.)

MATH 150. Calculus I (4)
A course in analytic geometry and calculus. Elementary and transcendental functions are introduced, their properties studied; limits, derivatives, integrals and mathematical modeling used in problem-solving in sciences.

MATH 151. Calculus II (4)
Prerequisite: MATH 150. Topics include: differentiation, integration, sequences, infinite series, and power series. (A lower division requirement in the quantitative economics emphasis.)

MATH 240. Linear Algebra (3)
Prerequisites: MATH 151. Topics include: matrices, linear systems of equations, determinants, vectors in 2 and 3 dimensions, eigenvalues, the vector space Rn, linear transformations, introduction to general vector spaces and applications. (A lower division required course in the quantitative economics emphasis.)

MATH 250. Calculus III (3)
Prerequisite: MATH 151 with a grade of C or better. Topics include: functions of several variables, solid analytic geometry, partial differentiation, multiple integrals with applications, vector analysis, and line and surface integrals. (A lower division required course in the quantitative economics emphasis.)

MATH 329. Statistics for Business & Economics (3)
Prerequisite: MATH 140 or 150. Introduction to modern statistical methods used in business analysis and economics, especially in experimental data evaluation and decision-making contexts. Topics include: sampling, probability, various distributions, correlation and regression, statistical inferences, hypothesis testing, problem solving and the consequences to underlying economical systems. Includes a project in the community. (Either MATH 329 or 352 is required. MATH 352 is required for the quantitative economics emphasis.)

MATH 440. Operations Research (3)
Prerequisite: MATH 140 or 150. Introduction to applied mathematical methods in management sciences. Topic include linear programming, managerial optimization methods, development of tools and methods required to make decisions and to solve operational problems in economy, decision and risk analysis, planning or scheduling problems, modeling and game theory. (An upper division elective in the quantitative economics emphasis.)

MGT 310. Management of International Businesses (3)
Identification and analysis of management systems in cross-border environments. Explores the impact of economic, social, cultural political variables on the conduct of profit-making business. Extensive use of case analysis; and a "county study" project. (An upper division elective in the international economics emphasis.)

SPAN 101. Elementary Spanish I (4)
This course addresses the development of basic functional proficiency in the Spanish language. As students develop their listening, speaking, reading and writing skills, they acquire knowledge about cultural similarities and differences between the U.S. and Spanish-speaking world. Not intended for students with two or more years of high school Spanish taken within the last three years or with credit in college-level Spanish.
GenEd: C3a
(An elective lower division course in the international economics emphasis.)

SPAN 102. Elementary Spanish II (4)
Addresses the development of basic functional proficiency in the Spanish language. As students develop their listening, speaking, reading and writing skills, they acquire knowledge about cultural similarities and differences between the U.S. and Spanish-speaking world.
GenEd: C3a
(An elective lower division course in the international economics emphasis.)

g. If any formal options, concentrations, or special emphases are planned under the proposed major, explain fully.

The proposed economics major consists of a required core of lower and upper division courses, and a required emphasis. The following emphases are proposed at this time: general economics, environmental resource economics, international economics, managerial economics, and quantitative economics. The emphases provide an integrative and cross-disciplinary experience for economics majors consistent with the CSUCI mission. In developing the emphases, courses were drawn from other CSUCI programs. In particular, the emphases make use of courses from business, environmental science and resource management, foreign languages and mathematics. No additional courses are required in these areas to implement the program.

Each emphasis consists of required lower and upper division courses, and upper division elective courses. The emphases are described below.

General Economics Emphasis (15 units- 3 lower division and 12 upper division)

Lower Division:

ACCT 210 Financial Accounting (3)

Upper Division:

A minimum of 4 upper division courses in economics (or approved courses outside of economics) as follows:

At least two courses must be taken from cross-disciplinary courses offered by economics (ECON 330-349 and 430-449).

A minimum of three economics courses at the 400 level are required.

ECON 300, 492, and 497 may not be taken to meet the requirements of the economics major.

Environmental Resource Economics Emphasis (15 units- 3 lower division and 12 upper division)

Lower Division:

ESRM 100 Introduction to Environmental Science and Resource Management (3)

Upper Division:

A minimum of 4 upper division courses in economics (or approved courses outside of economics) as follows:

ECON 362 Environmental Economics (3)
ECON 464 Natural Resource Economics (3)
ESRM 329 Environmental Law and Policy (3)

One course may be taken from the following list of approved courses outside of economics in meeting this requirement:
ESRM 410 Environmental Impact Assessment (3)
ESRM 462 Coastal and Marine Management (3)
ESRM 463 Water Resources Management (3)
ESRM 464 Land Use Planning and Agricultural Management (3)
ESRM 482 Issues in Environmental Planning and Resource Management (3)
ESRM 483 Issues in Global Resource Management (3)

A minimum of three economics courses at the 400 level are required.

ECON 300, 492, and 497 may not be taken to meet the requirements of the economics major.

International Economics Emphasis (20 units- 8 lower division and 12 upper division units)

Lower Division:

A minimum of 2 courses in a foreign language or equivalent (for example, SPAN 101 (4) and 102 (4). (Note: This requirement represents one additional course beyond the CSUCI foreign language requirement.)

Upper Division:

A minimum of 4 upper division courses in economics (or approved courses outside of economics) as follows:

Three courses from the following:

ECON 370	The World Economy (3)
ECON 471	International Trade (3)
ECON 472	International Macroeconomics (3)
ECON 473	Economic Development (3)
ESRM 483	Issues in Global Resource Management (3)
MGT 310	Management of International Business (3)

A minimum of three economics courses at the 400 level are required.

ECON 300, 492, and 497 may not be taken to meet the requirements of the economics major.

Managerial Economics Emphasis (15 units- 3 lower division and 12 upper division)

Lower Division:

ACCT 210	Financial Accounting (3)

Upper Division:

A minimum of 4 upper division courses in economics (or approved courses outside of economics) as follows:

Either

ECON 320	Money and Banking (3), or
ECON 329	Managerial Economics (3)

FIN 300	Business Finance (3)

At least one courses must be taken from cross-disciplinary courses offered by economics (ECON 330-349 and 430-449).

A minimum of three economics courses at the 400 level are required.

ECON 300, 492, and 497 may not be taken to meet the requirements of the economics major.

Note: Students selecting this emphasis must take either ECON 320 or 329, but may not take both courses for credit in the major.

Quantitative Economics Emphasis (19 units- 10 lower division and 9 upper division)

Lower Division:

MATH 151 Calculus II (4)
MATH 250 Calculus III (3)
MATH 240 Linear Algebra (3)

Upper Division:

A minimum of 3 upper division courses in economics (or approved courses outside of economics) as follows:

At least two courses must be taken from cross-disciplinary courses offered by economics (ECON 330-349 and 430-449).

One course may be taken from the following list of approved courses outside of economics in meeting this requirement:
BUS 320 Business Operations (3)
MATH 429 Operations Research (3)

A minimum of three economics courses at the 400 level are required.

ECON 300, 492, and 497 may not be taken to meet the requirements of the economics major.

Note: In meeting the calculus and statistics requirement, students selecting this emphasis must take MATH 150 and MATH 352.

h. Course prerequisites and other criteria for admission of students to the proposed degree major program, and for their continuation in it.

The proposed Economics major will be open to all CSUCI students in good standing.

COURSES WITH PREREQUISITES

	Prerequisites
ECON 310 Intermediate Microeconomics	ECON 110, 111 MATH 140 or 150
ECON 329 Managerial Economics	ECON 110, 111 MATH 140 or 150
ECON 311 Intermediate Macroeconomics	ECON 110, 111 MATH 140 or 150
ECON 320 Money & Banking	ECON 110, 111 MATH 140 or 150
ECON 362 Environmental Economics	ECON 110, 111
ECON 370 The World Economy	ECON 110 or 300
ECON 415 Industrial Organization	ECON 310 or 329
ECON 425 Labor Economics	ECON 310 or 329

ECON 450 Public Sector Economics	ECON 310 or 329
ECON 455 Urban and Regional Economics	ECON 310 or 329
ECON 464 Natural Resource Economics	ECON 310 or 329
ECON 471 International Trade	ECON 310 or 329
ECON 472 International Macroeconomics	ECON 311 or 320
ECON 473 Economic Development	ECON 310 or 329
ECON 480 Topics in Environmental & Natural Resource Econ	ECON 310 or 329
ECON 486 Introduction to Econometrics	ECON 310 or 329, 311 MATH 329
ECON 488 Applied Managerial Econometrics	ECON 310 or 329, BIOL/MATH/PSY 202, MATH 329 or 352
ECON 499 Economics Capstone	Required upper division courses in economics major (may be taken concurrently) and senior standing.
ESRM 329 Environmental Law and Policy	ESRM 100
ESRM 410 Environmental Impact Analysis	BIOL 433, ECON 362, ESRM 328, 329
ESRM 462 Coastal and Marine Management	BIOL 433, ECON 362, ESRM 329
ESRM 463 Water Resources Management	BIOL 433, ECON 362, ESRM 329
ESRM 464 Land Use Planning and Agricultural Management	BIOL 433, ECON 362, ESRM 329
ESRM 482 Issues in Environmental Planning	BIOL 433, ECON 362, ESRM 329
ESRM 483 Issues in Global Resource Management	BIOL 433, ECON 362, ESRM 329
FIN 300 Business Finance	ACCT 210, 220 ECON 110, 111 MATH 140 or 150
MATH 151 Calculus II	MATH 150
MATH 240 Linear Algebra	MATH 151
MATH 250 Calculus III	MATH 151
MATH 329 Statistics for Business & Economics	MATH 140 or 150
MATH 352 Probability and Statistics	MATH 151
MATH 440 Operations Research	MATH 140 or 150

i. Explanation of special characteristics of the proposed degree major program, e.g., in terminology, units of credit required, types of course work, etc.

The economics major at CSUCI will complete a set of foundation courses in economics and quantitative methods, and a required emphasis. The emphases are highly complementary with other academic programs at CSUCI. In particular, the emphases draw on courses from business, environmental science and resource management, foreign languages (at this time, Spanish), and mathematics.

The economics major will culminate with a required capstone course. In the capstone course, each economics major will prepare and present a senior project on a topic from his or her emphasis. The senior project could be a research paper based on an economic issue, or a report on a service learning or internship experience. In either case, the senior project will assist the economics majors in integrating the knowledge and tools gained in the foundation courses with that in the emphasis.

j. For undergraduate programs, provisions for articulation of the proposed major with community college programs.

The proposed major was designed so that transfer students could complete the lower division requirements for the major at the community colleges in the CSUCI service area. Many of the required lower division courses have been articulated with the California Articulation Number System (CAN).

Course	CAN Articulation	Local Community College Articulation
ECON 110	CAN ECON 4	Yes
ECON 111	CAN ECON 2	Yes
ACCT 210		Yes
ESRM 100		Yes
MATH 140		Yes
MATH 150	CAN MATH 18	Yes
MATH 151	CAN MATH 20	Yes
MATH 240		Yes
MATH 250		Yes
SPAN 101	CAN SPAN 2	
SPAN 102	CAN SPAN 4	

k. Provision for meeting accreditation requirements, where applicable, and anticipated date of accreditation request.

N/A

2. Need for the Proposed Degree Major Program

a. List of other California State University campuses currently offering or projecting the proposed degree major program; list of neighboring institutions, public and private, currently offering the proposed degree major program.

The economics major is offered at all of the other CSU campuses (with the exception of California Maritime Academy and CSU Monterey Bay) and all UC campuses (except UCSF). In addition, three nearby private institutions (California Lutheran, Pepperdine, Westmont) offer the degree.

b. Differences between the proposed program and programs listed in Section 2a above.

The CSUCI program is similar to other CSU and UC programs in that they all share a common core of lower and upper division core courses in economics and quantitative methods. The selection of emphases and the focus on interdisciplinarity are distinctive to the CSUCI program.

f. Professional uses of the proposed degree major program.

The Bachelor of Arts in Economics will prepare students for employment in a variety of organizations – both public and private – at the entry level. The Degree also prepares students for graduate school and professional school studies in such areas as business, public administration, law, environmental resource management and education.

g. The expected number of majors in the year of initiation and three years and five years thereafter. The expected number of graduates in the year of initiation and three years and five years thereafter.

	Number of Majors	Number of Graduates
Initiation Year	12	0
Third year	24	6
Fifth year	36	9

3. Existing Support Resources for the Proposed Degree Major Program

a. Faculty members, with rank, appointment status, highest degree earned, date and field of highest degree, and professional experience (including publications if the proposal is for a graduate degree), who would teach in the program.

Dennis Muraoka
Professor of Economics
PhD in Economics, 1981
CSU Professor since 1982
Extensive experience as employee and consultant in private and public sectors since 1975.

Paul Rivera
Assistant Professor of Economics
PhD in Economics, 2002
CSU Professor since 2002
Extensive experience as employee and consultant in private and public sectors since 1993.

Ashish Vaidya
Professor of Economics
PhD in Economics, 1990
CSU Professor since 1991
Extensive experience as employee and consultant in private and public sectors since 1988.

4. Additional Support Resources Required

b. Any special characteristics of the additional faculty or staff support positions needed to implement the proposed program.

There are currently three tenure-track economics faculty at CSUCI. No additional tenure-track faculty are needed to implement the major. The faculty support staff currently assisting the faculty are sufficient to implement the major.

c. The amount of additional lecture and/or laboratory space required to initiate and sustain the program over the next five years. Indicate any additional special facilities that will be required. If the space is under construction, what is the projected occupancy date? If the

space is planned, indicate campus-wide priority of the facility, capital outlay program priority, and projected date of occupancy.

The economics major will rely on existing course offerings during its first year and will, therefore, not require additional lecture or laboratory space to initiate. In future years additional courses will be offered in support of the major. These course offerings will require additional lecture space.

d. Additional library resources needed. Indicate the commitment of the campus to purchase or borrow through interlibrary loan these additional resources.

No additional library resources needed above the existing CSUCI Library acquisition program. The faculty is working with the Library staff to assure an appropriate level and subject distribution of library resources.

e. Additional equipment or specialized materials that will be (1) needed to implement the program and (2) needed during the first two years after initiation. Indicate the source of funds and priority to secure these resource needs.

There are no additional needs beyond those planned during the development of the campus facilities.

5. Abstract of the Proposal and Proposed Catalog Description

ECONOMICS

The existence of scarcity requires that difficult decisions must be made on how resources will be allocated among competing uses. Economics is the social science that addresses the allocation and distribution of scare resources. The application of economics to the behavior of individuals and individual markets is called microeconomics. Microeconomics is used to explain and predict the behavior of consumers, managers, citizens and government officials, and the production and pricing of individual goods and services. The application of economics to the economy as a whole is called macroeconomics. Macroeconomic is used to explain and predict the economy's output and income, level of employment and price level.

Students who successfully complete the Bachelor of Arts in Economics will be able to:

- Define the concept of scarcity and explain the role of economics in efficient resource use.
- Identify situations in which economic analysis is applicable, as well as those outside the realm of economic thought.
- Address issues and problems from not only the economic perspective, but also from other perspectives as appropriate to the situation.
- Identify the assumptions of economic theory and explain the consequences of violating those assumptions.
- Apply the techniques of marginalist decision-making in the definition and solution of economic problems.
- Explain the determinants of aggregate economic activity and their implications for both private and public sector decisions.
- Explain the interactions between consumers and firms in a market-based economy.
- Identify, locate, evaluate, synthesize and present current research and information on economic issues.
- Formulate testable hypotheses concerning economic problems and issues.
- Collect, organize, analyze, interpret and present quantitative and qualitative data.
- Use current, technological tools in the collection, organization, analysis and interpretation of data.
- Communicate in written and oral forms with interested citizens and professionals on economic issues.

The Economics Major prepares students for careers in both the public and private sectors. The Major can also prepare students for graduate study in such fields as economics, business, resource management, public administration, law, and international affairs.

PROPOSED COURSE OF STUDY FOR BACHELOR OF ARTS IN ECONOMICS, GENERAL ECONOMICS EMPHASIS:

FIRST YEAR (30-31 Units)

FALL (15-16 Units)
- ECON 110 Principles of Microeconomics (3)
- Calculus requirement (MATH 140 or 150); GE Category B-3 (3-4)
- GE Category A-2 (3)
- GE, Category B-1 (3)
- GE, Category E (3)

SPRING (15 Units)
- ECON 111 Principles of Macroeconomics (3)
- GE, Category B-2 (3)
- GE, Category C-1 (3)
- GE Category D (3)
- Title V (3)

SECOND YEAR (30 Units)

FALL (15 Units)
- ACCT 210 Financial Accounting (3)
- ECON 310 Intermediate Microeconomics (3)
- GE, Category A-1 (3)
- GE, Category C-2 (3)
- Title V (3)

SPRING (15 Units)
- ECON 311 Intermediate Macroeconomics (3)
- GE, Category A-3 (3)
- GE, Category C-3a (3)
- GE, Category C-3b (3)
- GE, Category D (3)

THIRD YEAR (30-31 Units)

FALL (15 Units)
- Upper Division Economics Elective (3)
- Statistics requirement (MATH 329 or 352) (3)
- GE, Category B-4 (3)
- GE, Category D (3)
- Elective (3)

SPRING (15 Units)
- Upper Division Economics Elective (3)
- Econometrics requirement (ECON 486 or 488) (3-4)
- GE Interdisciplinary with Economics (3)
- GE, Category D (3)
- Elective (3)

FOURTH YEAR (30 Units)

FALL (15 Units)
- Upper Division Economics Elective (3)
- Upper Division Economics Elective (3)
- GE Interdisciplinary Outside Economics Major (3)

Elective (3)
Electives (3)

SPRING (15 Units)
ECON 499 Economics Capstone (3)
GE Interdisciplinary with Economics (3)
Electives (3)
Electives (3)
Electives (3)

REQUIREMENTS FOR THE BACHELOR OF ARTS IN ECONOMICS:

Lower Division Required	9-10
Upper Division Required	15-16
Required Emphasis	15-20
General Education	48
Title V	6
Free Electives	21-27
Total	120

Lower Division Requirements (12-13 units):

Introductory Economics Requirement
ECON 110 Principles of Microeconomics (3)
ECON 111 Principles of Macroeconomics (3)

Calculus Requirement
Either
MATH 140 Calculus for Business Applications (3), or
MATH 150 Calculus I (4)*

Upper Division Requirements (15-16 units):

Intermediate Economic Theory Requirement
ECON 310 Intermediate Microeconomics (3)
ECON 311 Intermediate Macroeconomics (3)

Statistics Requirement
Either
MATH 329 Statistics for Business and Economics (3), or
MATH 352 Probability and Statistics (3)[1]

Econometrics Requirement
Either
ECON 486 Introduction to Econometrics (3), or
ECON 488 Applied Managerial Econometrics (4)

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* MATH 150 and MATH 352 are required for Quantitative Economics Emphasis.

Capstone Requirement
ECON 499 Capstone (3)

Required Emphasis (15-20 units):

Economics majors are required to complete one of the following emphases-

General Economics Emphasis (15 units- 3 lower division and 12 upper division)

Lower Division:

ACCT 210 Financial Accounting (3)

Upper Division:

A minimum of 4 upper division courses in economics (or approved courses outside of economics) as follows:

At least two courses must be taken from cross-disciplinary courses offered by economics (ECON 330-349 and 430-449).

A minimum of three economics courses at the 400 level are required.

ECON 300, 492, and 497 may not be taken to meet the requirements of the economics major.

Environmental Resource Economics Emphasis (15 units- 3 lower division and 12 upper division)

Lower Division:

ESRM 100 Introduction to Environmental Science and Resource Management (3)

Upper Division:

A minimum of 4 upper division courses in economics (or approved courses outside of economics) as follows:

ECON 362 Environmental Economics (3)
ECON 464 Natural Resource Economics (3)
ESRM 329 Environmental Law and Policy (3)

One course may be taken from the following list of approved courses outside of economics in meeting this requirement:
ESRM 410 Environmental Impact Assessment (3)
ESRM 462 Coastal and Marine Management (3)
ESRM 463 Water Resources Management (3)
ESRM 464 Land Use Planning and Agricultural Management (3)
ESRM 482 Issues in Environmental Planning and Resource Management (3)
ESRM 483 Issues in Global Resource Management (3)

A minimum of three economics courses at the 400 level are required.

ECON 300, 492, and 497 may not be taken to meet the requirements of the economics major.

International Economics Emphasis (20 units- 8 lower division and 12 upper division units)

Lower Division:

A minimum of 2 courses in a foreign language or equivalent (for example, SPAN 101 (4) and 102 (4). (Note: This requirement represents one additional course beyond the CSUCI foreign language requirement.)

Upper Division:

A minimum of 4 upper division courses in economics (or approved courses outside of economics) as follows:

Three courses from the following:

ECON 370	The World Economy (3)
ECON 471	International Trade (3)
ECON 472	International Macroeconomics (3)
ECON 473	Economic Development (3)
ESRM 483	Issues in Global Resource Management (3)
MGT 310	Management of International Business (3)

A minimum of three economics courses at the 400 level are required.

ECON 300, 492, and 497 may not be taken to meet the requirements of the economics major.

Managerial Economics Emphasis (15 units- 3 lower division and 12 upper division)

Lower Division:

ACCT 210 Financial Accounting (3)

Upper Division:

A minimum of 4 upper division courses in economics (or approved courses outside of economics) as follows:

Either

ECON 320	Money and Banking (3), or
ECON 329	Managerial Economics (3)

FIN 300 Business Finance (3)

At least one courses must be taken from cross-disciplinary courses offered by economics (ECON 330-349 and 430-449).

A minimum of three economics courses at the 400 level are required.

ECON 300, 492, and 497 may not be taken to meet the requirements of the economics major.

Note: Students selecting this emphasis must take either ECON 320 or 329, but may not take both courses for credit in the major.

Quantitative Economics Emphasis (19 units- 10 lower division and 9 upper division)

Lower Division:

MATH 151	Calculus II (4)
MATH 250	Calculus III (3)
MATH 240	Linear Algebra (3)

Upper Division:

A minimum of 3 upper division courses in economics (or approved courses outside of economics) as follows:

At least two courses must be taken from cross-disciplinary courses offered by economics (ECON 330-349 and 430-449).

One course may be taken from the following list of approved courses outside of economics in meeting this requirement:

BUS 320	Business Operations (3)
MATH 429	Operations Research (3)

A minimum of three economics courses at the 400 level are required.

ECON 300, 492, and 497 may not be taken to meet the requirements of the economics major.

Note: In meeting the calculus and statistics requirement, students selecting this emphasis must take MATH 150 and MATH 352.