

**NEW COURSE PROPOSAL**

PROGRAM AREA \_\_\_\_\_

**1. Catalog Description of the Course.** *[Include the course prefix, number, full title, and units. Provide a course narrative including prerequisites and corequisites. If any of the following apply, include in the description: Repeatability (May be repeated to a maximum of \_\_\_ units); time distribution (Lecture \_\_\_ hours, laboratory \_\_\_ hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]*

**MATH 329. STATISTICS FOR BUSINESS AND ECONOMICS (3)**

Three hours of lecture in the lab per week.

Introduction to modern statistical methods used in business and economic analysis. Topics include: sampling, probability, various distributions, correlation and regression, statistical inferences, hypothesis testing, problem solving and the consequences to underlying economical systems.

Gen Ed: B3

**2. Mode of Instruction.**

	<b>Units</b>	<b>Hours per Unit</b>	<b>Benchmark Enrollment</b>
Lecture	3	1	24
Seminar	_____	_____	_____
Laboratory	_____	_____	_____
Activity	_____	_____	_____

**3. Justification and Learning Objectives for the Course.** (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) *[Use as much space as necessary]*

This course is required for Business major students according to accreditation guidelines.

Students will be able to

- discuss the application of statistics in business and research situations.
- discuss the nature of statistical inference and apply the methods
- analyze data in statistical and graphical terms.
- use a computer-based statistics software package.
- demonstrate a variety of commonly used techniques and the models underlying them.
- express a generally posed scientific question as a statistical question in a written and oral form

**4. Is this a General Education Course**                      **YES**

**If Yes, indicate GE category:**

<b>A (English Language, Communication, Critical Thinking)</b>	
<b>B (Mathematics &amp; Sciences)</b>	<b>B3</b>
<b>C (Fine Arts, Literature, Languages &amp; Cultures)</b>	
<b>D (Social Perspectives)</b>	
<b>E (Human Psychological and Physiological Perspectives)</b>	
<b>INTERDISCIPLINARY</b>	

**5. Course Content in Outline Form.** *[Be as brief as possible, but use as much space as necessary]*

- Graphical Descriptive Techniques
- Numerical Descriptive measures
- Data Collection and Sampling
- Probability Distributions (Discrete and Continuous)

Central Limit Theorem  
Estimation  
Hypothesis Testing  
Comparison of Two Populations  
Anova  
Simple Linear Regression and Correlation  
Forecasting

**6. References.** [Provide 3 - 5 references on which this course is based and/or support it.]

*Statistics For Management and Economics*, Gerald Keller, Brian Warrack, Brookes/Cole 2002

**7. List Faculty Qualified to Teach This Course.**

All Mathematics faculty

**8. Frequency.**

a. Projected semesters to be offered: Fall  Spring  Summer

**9. New Resources Required.**

a. Computer (data processing), audio visual, broadcasting needs, other equipment

Access to computer labs to use statistical packages

b. Library needs

none

c. Facility/space needs

none

**10. Consultation.**

Attach consultation sheet from all program areas, Library, and others (if necessary)

**11.** If this new course will alter any degree, credential, certificate, or minor in your program, attach a program modification.

\_\_\_\_ Ivona Grzegorzcyk \_\_\_\_\_ 1/8/03 \_\_\_\_\_  
Proposer of Course Date

## Approvals

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Program Coordinator \_\_\_\_\_ Date \_\_\_\_\_

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GE Committee Chair \_\_\_\_\_ Date \_\_\_\_\_  
(If applicable)

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Curriculum Committee Chair \_\_\_\_\_ Date \_\_\_\_\_

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Dean \_\_\_\_\_ Date \_\_\_\_\_

Effective Semester: \_\_\_\_\_

**California State University Channel Islands  
New Course Proposal Consultation Sheet**

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1. Course prefix, number, title, and units: \_\_\_\_\_ **MATH 340. Statistics for Business and Economics (3)**

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2. Program Area: \_\_\_\_\_ MATH \_\_\_\_\_

**Recommend Approval**

<b>Program Area/Unit</b>	<b>Program/Unit Coordinator</b>	<b>YES</b>	<b>NO</b> (attach objections)	<b>Date</b>
Art				
Business & Economics				
Education				
ESRM				
Humanities				
Liberal Studies				
Mathematics & CS				
Sciences				
Library*				
Information Technology*				

\* If needed