UCC Document # ________
College Document # _____
Review Type: ___Edit ___ Exp ___Full

CATALOG YEAR 2012-2013

COLLEGE/SCHOOL/SECTION: A. R. Sanchez School of Business__________________

Course: FIN 6340 Add: _X__ Delete: ___
(check all that apply) Change: Number _X__ Title _X__ SCH _X__ Description _X__ Prerequisite __X___

Response Required: **New** course will be part of major _X__ minor ___ as a required ___ or elective ___ course

Response Required: **New** course will introduce _X__, reinforce _X__, or apply _X__ concepts

If new, provide Course Prefix, Number, Title, **Measurable** Student Learning Outcomes, SCH Value, Description, prerequisite, and lecture/lab hours if applicable. If in current online catalog, provide change and attach text with changes in red and provide a brief justification.

FIN 6340: Advanced Financial Econometrics (3 semester credit hours) (replacing BA 6399) Pre-requisite: Finance 6335

Advanced financial econometrics. This course covers methodologies appropriate to the analysis of financial data as it is associated with advanced time series modeling including systems of equations, simultaneous equations and limited dependent variable models. These approaches include panel estimation procedures, autoregressive moving average models, generalized autoregressive conditional heteroskedasticity, vector autoregression and vector error correction. The multiple implications of random walks are examined in detail, including problems associated with difference stationarity, trend stationarity, and noise modeling.

Learning outcomes:

- Students will be able to explain/summarize/describe major time series analysis methods including Autoregressive Conditional Heteroskedasticity (ARCH) models, Generalized Autoregressive Conditional Heteroskedasticity (GARCH) Models, and Threshold Autoregressive Conditional Heteroskedasticity (TARCH) Models.
- Students will be able to use time series analysis methods to solve econometrics problems related to difference stationarity, trend stationarity, and noise modeling.
- Students will be able to critically analyze different econometrics research studies involving a particular issue and explain if the corresponding conclusions, inferences, and/or generalizations are supported by sound evidence.
- Students will be able to evaluate and communicate the perceived merits and significance of a series of econometrics research studies involving a particular issue or using a particular econometric method.
- Students will be able to demonstrate advanced theoretical and/or practical research skills for their areas of specialization by developing an original and publishable research

manuscript/presentation.

Program: Delete: ___ Add: ___ Change: ___ Attach new/changed Program of Study description and 4-year plan. If in current online catalog, provide change and attach text with changes in red.

Minor: Add: ___ Delete: ___ Change: ___ Attach new/changed minor. If in current online catalog, provide change and attach text with changes in red.

College Introductory Pages: Add information: ___ Change information: ___
Attach new/changed information. If in current online catalog, provide change and attach text with changes in red.

Other: Add information: ___
Change information: ___ Attach new/changed information. If in current online catalog, provide change and attach text with changes in red.

Milton Mayfield

Approvals: Signature Date

Chair
Department Curriculum Committee
2 Feb 2011

Chair
Milton Mayfield

Department
Ken Hung
Digitally signed by Ken Hung
DN: cn=Ken Hung, email=ken.hung@tamiu.edu, o=SSB, ou=IBFS, c=US
Date: 2012.03.06 10:56:41 -06'00'

Chair
College Curriculum Committee
2 Feb 2011

Dean
Robert S. Sears
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DN: cn=Robert S. Sears, email=steve.sears@tamiu.edu, o=Texas AM International University, ou=A.R. Sanchez, Jr. School of Business, c=US
Date: 2012.03.06 11:07:07 -06'00'

04/2011