ECONOMIC FORECASTING COURSE SYLLABUS

Economics Department is housed in The Fogelman College of Business & Economics at The University of Memphis. The twin objectives of the Business Economics program are to provide relevant students with a solid foundation and the analytical and critical thinking skills needed to make effective decisions, and promote/develop ‘economic literacy’. ¹ Some core components of ‘economic literacy’ embedded in the Economic Forecasting course include (but not limited to) the understanding IT and proficiency in relevant computer applications, knowledge integration across disciplines in defining and researching solution to business economics problems, acquiring critical thinking and decision-making skills essential to solving business problems, effective oral and written communication skills; the ability to contribute effectively within a team (group work) environment and acquiring a solid background in economic analysis with the ability to identify and convey real-world economic issues.

The 2009/10 Undergraduate Catalog describes course coverage contents to comprise “current economic thinking on the problems of recession and inflation as background to economic forecasting; methodologies of forecasting analyzed with examples of each.”

Prerequisites: ISDS 3711 (Analytical Tools for Business Decisions) or Equivalent.
The course also assumes prior knowledge of (sophomore level), or ability to quickly catch up with, fundamental macroeconomic principles (sophomore level). This course uses basic statistics and basic economics to develop application of basic and a little more advanced econometric tools for forecasting business activities. Therefore, we first review basic regression model building and specification, and statistical hypothesis testing consistent with defined theoretical thinking in economics and allied disciplines. These are then extended to business economic forecasting and the challenges a trained forecaster must navigate through to raise reasonable confidence in their forecasts. This course is heavily application oriented and in so doing requires student to be reasonably adept at using the text-packaged ForecastX technology or use other software capable of data importing-exporting (SAS, STATA, Egret, R, SHAZAM, STATPAC, E-Views, etc, etc.). Data manipulation and retrieval/archiving will be important.

¹ http://www.memphis.edu/ugcatalog/collegeprog/fcbe/econ.php
There is no better opportunity than now for business-oriented economists and other disciplines (from Marketing to Meteorology) to be adept at forecasting (cost, revenues, weather, patient load, product demand/ usage, profit, capacity, investment rates of returns, etc., ). Undergraduate degree holders with sharp forecasting skills, armed with the science and art of their craft (and limitations) are increasingly better positioned for solid jobs in businesses, government, non-profit, and other agencies. Forecasters are capable of launching their own consulting companies or secure an enviable job at one.

REQUIRED Text


SUGGESTED Companion Texts


ATTENDANCE: Attend class prepared by reading ahead. U of M class attendance policies apply. This should be an exciting class for all students that study, ask timely questions, seek necessary help, and do their work on time. I look forward to your consistent attendance each class time.

CONDUCT: Student Handbook’s student conduct policies in and outside of university, fully governed by all applicable U of M’s rules & policies [http://saweb.memphis.edu/judicialaffairs/pdf](http://saweb.memphis.edu/judicialaffairs/pdf), including but not limited to the offices of Student Affairs, Student Disability Services, and Student Development). [http://www.memphis.edu/atoz.htm](http://www.memphis.edu/atoz.htm), are fully incorporated by reference herewith.

GRADING: QUIZZES 5 in-class Quizzes, 7% each, equals 35% Course

GROUP HOME-WORK 7 Assignments, 5% each, equals 35% Course

INDIVIDUAL TERM PAPER 25% Written, equals 25% Course

IN-CLASS PARTICIPATION 5%, equals 5% Course

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2 The FORECASTX software by John Galt Solutions, an Excel-based industry forecasting system, has been updated for Excel 2007 and Vista. The forecasting program, widely used in business and industry globally and in the US, is user-friendly and also compatible with Office 2003 and Windows XP. You should install the FORECASTX on your personal computer (PC or Notebook) or use it as necessary at the university’s many Computer Labs (e.g., in The FCBE).
The course professor assigns students to groups, well-diversified across background intellectual disciplines, gender, ethnicity/national origins. (This was done as of January 14, 2010). This is the face of the global-minded workplace now and for the foreseeable future. There is at least one economics/finance Major adept at statistics/econometrics in each work group. Others in the group are further expected to import their own knowledge skills set into the work group, as economic forecasting is richer tempered with other relevant intellectual areas. Make applicable travel/personal travel plans to not conflict with quiz class times, home-work or H/W due dates.

- Student must be present in class to take in-class Quizzes at scheduled time (a make-up may be given if a student missed class under University’s acceptable conditions and also followed proper rules of notification and proofs of absence). Quiz grade is an absolute zero, if missed without legitimacy.
- GROUP assignments are due for turning in at the START of class time on due date (A group member’s grade will be adjusted down if other team members have written legitimate complaints of ‘free-riding’)
- LATE WORK can only earn a maximum of 50% of its worth (if totally correct), as deadlines are critical in real life job scenarios!
- TERM PAPER is due on the last day of classes (NO EXCEPTIONS). The paper, which should be a forecasting analysis for a specific clientele, should INCLUDE THE FOLLOWING PARTS:
  (a) be a clearly-defined question of significant interest to an identified entity (business, government, not-for-profit unit ...; (b) a concise review of relevant and related studies and forecasts; (c) a methodological analysis of forecasting options and discussion of that/those chosen with rationale for such a choice; (d) the forecast and analysis, presenting more than one scenario and an analysis of potential error of the forecast. The paper should be at most 15 d/s pages for all components excluding title page, the abstract, figures, references/work cited, and any appendix. 3

DUE DATES: Will be announced in class, on a timely basis, and will be based on speed of course content coverage.

GRADING SCALE  A: 90-100  B: 80-89  C: 70-79  D: 60-69  F: <60.

VITAL DATES: Dr. Martin L. King Day (1/18), Spring Break (3/8-3/14), Last Day of Classes (4/28), Study Day (4/29), Final Examination in this course (5/6, 10.30 – 12.30am).

IMPORTANT OTHER ANNOUNCEMENTS: If a student requires additional tutoring/other professional, make timely requests to secure the best possible assistance within U-of-M regulations and accommodations.

3 This specification structure for a term paper requirement in an economic forecasting course is standard at an AACSB (Quality) accredited School of Business in Economics. See, e.g., Prof. Barry Professor Hughes (University of Denver).
TOPICAL GUIDES: Chapters listed or the extent of material coverage within chapters can vary and may be modified as instructor deems fit to accommodate coverage of emerging markets forecasting trends and methodological updates- domestically (US) and globally (rest of world).

Ch. 1. Introduction to Business Forecasting, text pgs. 1 - 53
Ch. 2. The Forecast Process, Data Considerations, and Model Selection, text pgs. 56-96
Ch. 3. Moving Averages and Exponential Smoothing, text pgs. 101-152
Ch. 4. Introduction to Forecasting with Regression Methods, text pgs. 160-214
Ch. 5. Forecasting with Multiple Regression, text pgs. 225-284
Ch. 6. Time-Series Decomposition, text pgs. 298-339
Ch. 7. ARIMA (Box-Jenkins)-Type Forecasting Models, text pgs. 343-401
Ch. 8. Combining Forecast Results, text pgs. 402-433
Ch. 9. Data Mining, text pgs. 439-479
Ch. 10. Forecast Implications, text pgs. 482-507