

### MASTER SYLLABUS ECON620: MICROECONOMIC INDUSTRY ANALYSIS

### 1. Course Details

Semester:

Course Code: ECON620

Course Name: Microeconomic Industry Analysis

Course Prerequisites: ECON510, QANT510

Course Co-requisites: None

Credits Hours: One and one-half (1.5) credit hours

Classroom:

Class Timing: (18.75 contact hours)

Final Exam Period:

### 2. Instructor Details

Professor:

Office Location:

Office Hours:

Fmail:

Course website:

Phone (Office):

### 3. Catalog Course Description

This course introduces students to empirical techniques and model building for policy analysis and forecasting. Demand models are developed to demonstrate the econometric and forecasting methods and utilize an industry standard econometric software package.

### 4. Course Overview

This course is designed to demonstrate how various statistical techniques can be applied to analyzing demand forecasts as they apply to the organization's short and long-term planning processes. The course integrates elements of business planning, micro-economic theory, and statistics, and utilizes both an industry standard software package (Eviews) together with real data to provide recommendations that are representative of those that form the basis for planning in an existing industry.



- 5. Course-Level Learning Goals<sup>1</sup>
  - (A) <u>Invariant Learning Goals</u> (In support of the MBA Programmatic Learning Goal(s)): Upon the successful completion of this course, the student will be able to:
  - 1. Specify an econometric model and query various government databases to collect economic data.
  - 2. Utilize Eviews to conduct analysis and check for appropriate model specification.
  - 3. <u>Estimate</u> the price elasticity of demand using an econometric model and <u>assess</u> the impact of the socio-economic variables under alternative scenarios.
  - 4. Generate demand forecasts using econometric techniques; and
  - 5. Utilize outcomes to inform business policy.

Assurance of Learning Validations (Linked to the MBA Programmatic Learning Goal(s)) 2:

A1: Econometrics Project: Each student will be responsible for generating a sales forecast for a selected industry or multi-national firm using econometric methods, using a sales data set collected from the Bloomberg system. In addition, students must gather information on relevant measures of prices, income, advertising data, and other relevant (socio-economic) data to support the construction of a multi-variate regression model. The student must build the econometric model utilizing Eviews. Results of the analysis must include (a) an executive summary of the outcomes; (b) information supporting the choice of the variables, including the socio-economic variables (model specification), (c) detail concerning the model development and data acquired; (d) interpretation of the statistical results, the coefficients, and the sales forecasts including confidence intervals; (e) a sensitivity analysis for

<sup>&</sup>lt;sup>2</sup> A note on School of Management Assurance of Learning Scoring: Scores form the metric for the degree to which the validation (e.g. learning outcome) satisfies the associated learning goal or objective. Assurance of learning validation descriptions identify the criteria for each score that is to be given. Scores are scaled using program or concentration rubrics. It must be noted that scores are to be differentiated from grades. Scores form a criterion from which an instructor will ascertain an overall grade for any instrument of assessment, and the overall assessment the student receives for an instrument is a "grade." A score is an extraction that specifically measures the degree of attainment of a learning goal and/or objective.



<sup>&</sup>lt;sup>1</sup> A note on School of Management Course-Level Learning Goals: Learning goals are partitioned into those that are in support of the programmatic learning goals (Invariant), specific to the localized region of delivery (Contextualized), and specific to the domain expertise of the instructor (Instructor-Specific). The former two categories are required for all courses. Invariant "Assurance of Learning Validations" are specifically linked to the associated programmatic learning goal and objective, with course-level learning goals representing the programmatic goal as it applies to the context of the course. Learning goals that focus on knowledge acquisition (Bloom's Taxonomy) are not specifically or necessarily included into the course-level learning goals, although it is assumed that knowledge acquisition of all relevant business core fundamentals is addressed within each course. Examinations in class are used to provide feedback concerning knowledge and comprehension for the purpose of ensuring that students who have not mastered these will not advance through the curriculum. Attainment of knowledge within each core area is assessed by way of standalone testing of each student as a required part of the instructional program prior to graduation (e.g. ETS).



alternative scenarios, and interpretation of the elasticities and the implication to pricing strategy; and (f) interpretation of the results with implications to business policy.

Six scores will be provided. The basis for these scores are the student ability to (a) provide a justification for the model specification based on relevant theory and gather the appropriate data (MBA-2M); (b) use EViews to generate forecasted demand outcomes (MBA-1M); (c) test the model for compliance with typical OLS assumptions and make necessary corrections (MBA-1M); (d) assess the impact of the socio-economic variable on the demand for the product under alternative scenarios (MBA-2G); (e) discuss the relevant economic implications of the estimated elasticities (MBA-ECON); and (f) suggest meaningful implications that inform business policy of a multi-national firm (MBA-MGMT).

### (B) Contextualized (Globalized) Learning Goal(s):

Upon the successful completion of this course, the student will be able to:

1. See Invariant Learning Goal 4 above.

Assurance of Learning Validation (In support of the Contextualized (Globalized) Learning Goal(s)): B1. See Assurance of Learning Validation A1(score f) above.

### (C) Instructor Specific Learning Goal(s) (Optional):

None

Assurance of Learning Validation (In support of the Instructor Specific Learning Goal(s)):

None

### 6. Teaching and Learning Methodology

The School of Management's teaching and learning strategy is informed by contemporary indicators/sources that derive from its target market, specifically the millennial generation. In particular, behavioral traits for this generation are identified and form the basis of emphasis for the schools' teaching and learning methodologies. These methodologies are reflected in the school's mission statement by way of its TEMPOS campaign<sup>3</sup>. In addition, teaching and learning strategies are informed by institutional indirect assessment results, periodically collected and reviewed by the Office of Planning and Assessment and the school's faculty<sup>4</sup>. Teaching and learning strategies are also externally referenced systematically (e.g., the Annual Stakeholder's Conference) through continuing consultations with non-board key

<sup>&</sup>lt;sup>3</sup> Teaching and Learning Strategies: "TEMPOS and the Millennials," revised September 2008.

<sup>&</sup>lt;sup>4</sup> E.g., Student Survey on Teaching Quality – Quantitative Data: School of Management.



stakeholder groups, including employers, business and community leaders, accreditation and ministerial agencies, alumni, students, peer institutions, and business and governmental agency representatives.

A component of all courses, as a part of the teaching and learning strategies, is to maintain academic rigor and to be intellectually challenging. This is validated in institutional survey results. However, School of Management faculty members utilize an overall collective portfolio of strategies/initiatives that obtain from the aforementioned sources in delineating those that are most appropriate or emphasized in the courses they lead.

In this course (ECON620), four (4) prioritized teaching and learning strategies focus on:

- 1. In-class interactive discussion;
- 2. solving problems;
- 3. use of technology; and
- 4. use of the web.

All faculty members that instruct this course should consider how to execute the course to emphasize these key components of the strategies considered. Following a review of learning outcomes, faculty members consider how re-orientation of teaching and learning strategies might result in strengthening these outcomes, and adjustments are made, accordingly. Faculty members also consider how the School of Management Triple Platforms of Excellence (Professional Enrichment, Experiential Education, and Student Advancement) might be leveraged as a part of this strategy, and provide recommendations to the Directors of those platforms. The school also reviews the distribution of identified teaching and learning strategies periodically to ensure comprehension and the integration of each (from the designated list of approximately 20-25 strategies) within the curriculum. Finally, results from student teaching evaluations also provide indications of how various teaching and learning strategies are integrated into the course delivery. The following issues (indicator number is provided) are among those in the evaluations that bear on this review and analysis:

- 7. The amount of work in this course was appropriate.
- 15. The instructor was available for course related consultation and advice.
- 17. The instructor assigned challenging course work.
- 18. The instructor graded and returned student work and exams promptly.
- 19. The instructor provided helpful, constructive feedback on assignments and course work.
- 20. The instructor respected cultural differences and diversity among students.
- 21. The instructor incorporated information technology (e.g. computer or the Internet) in the course.



### 25. The instructor challenged me to think.

Along with teaching and learning strategies, the notion of student effort/time on task is also considered, although it is not necessarily driven by metrics. It is noted that the notion of student effort, specifically metric driven, is not a universally adopted approach<sup>5</sup>. However, if an instance occurs where student learning outcomes do not meet targeted academic standards, the School of Management utilizes indirect inputs in this area to explore the interdependencies between factors including the amount of work required in the course, the degree of challenge in the coursework, and level of critical analysis, among others<sup>6</sup>.

#### 7. Required Resource(s)

Paul G. Keat, Young and Erfle. (2013). Managerial Economics. 7<sup>th</sup> ed. Pearson. ISBN: 978-0-13-302088-5.

Eviews Econometric Software

### 8. Reference Resource(s)

Wooldridge, J. (2008) *Introductory Econometrics: A Modern Approach*. 4<sup>th</sup> Ed. Thompson/SouthWestern. ISBN: 9780324581621.

Wall Street Journal
New York Times
Business Week
Barron's
Outside supplemental readings
Survey of Current Business
Economist

<u>www.bea.com</u>
<u>www.yardeni.com</u>

www.ita.doc.gov

Bureau of Economic Analysis

Source of economic information

International trade Administration

<sup>&</sup>lt;sup>6</sup> Sample data regularly collected through the New York Institute of Technology Student Rating of Courses/Teaching Form.



<sup>&</sup>lt;sup>5</sup> See the Victorian TAFE Association Response – Strengthening the AQF: Proposal, June 2009. East Melbourne, Victoria, Australia, retrieved from <a href="http://www.vta.vic.edu.au/docs/PositionDiscussion%20Papers/VTA\_Response\_Strengthening\_the\_AQF.pdf">http://www.vta.vic.edu.au/docs/PositionDiscussion%20Papers/VTA\_Response\_Strengthening\_the\_AQF.pdf</a> on February 22, 2010.



www.imf.org

IMF website

www.stls.frb.org/fred www.quote.yahoo.com Fed's global databank

w.quote.yahoo.com Financial market information

<u>www.pei-intl.com</u> Financial information <u>www.clev.frb.org</u> Fed's latest research

9. Assessment Methodology and Grading Guidelines

Instrument	Points (i.e. weights)
Econometrics Project (see A1)	40 points
Homework Problems	20 points
Final Exam	40 points
TOTAL	100 points

- 10. Grading Guidelines: The final grade for the course will be calculated using the relevant grading scale: N/A
- 11. Attendance Policy: Students are expected to attend every class session. Instructors will inform students of the exact number of absences and late-arrivals permitted during the semester. Students who exceed these limits may be subject to failure. If a student misses any class or test, the instructor has the right to either grant or deny an opportunity to make up the work that was missed. In such cases, the instructor shall be the sole judge of the validity of a student's explanation for having missed the class or test.
- 12. Deductions for Late Arrival, Early Departure, and Unexcused Absences:
- 13. Policy for Make-Up Assignments or Quizzes:
- 14. Classroom Behavior: Behavior that disrupts, impairs, interferes with, or obstructs the orderly conduct, processes, and functions within an academic classroom or laboratory violates the student code of conduct and may result in disciplinary action. This includes interfering with the academic mission of NYIT or individual classroom or interfering with a faculty member's or instructor's role to carry out the normal academic or educational functions of their classroom or laboratory, including teaching and research.
- 15. Students with Physical or Educational Challenges:
  - It is the policy of New York Institute of Technology to provide reasonable accommodations for students who are otherwise qualified but have disabilities, including learning disabilities, health impairments,



- and other disabling conditions. Possible accommodations include, but are not limited to, test schedule modifications, class relocation, and possible assistance in acquisition of necessary equipment.
- The college has an interest in helping students with disabilities to be competitive in this academic environment. Therefore, reasonable accommodations will be made upon proof both of disability and need for the accommodations. It must be understood that accommodations are meant to facilitate educational opportunities. Admission to NYIT and accommodations do not guarantee success. Therefore, in addition to accommodations, the college encourages utilization of auxiliary services available to all students to maximize opportunities for success. Students whose disabilities may require some type of accommodation must complete a request for accommodations form and an intake interview with their campus services coordinator prior to the academic semester. Accommodations maybe requested at any time during the semester; however, accommodations cannot be applied to past failures, only to future academic endeavors. Appropriate modifications of accommodations will be worked out on a case-by-case basis and will not necessarily incorporate all requested changes.
- Students for whom auxiliary services—such as readers, interpreters, note takers, etc.—have been approved should arrange these with their campus services coordinator. In addition to discussing appropriate educational modifications, the campus services coordinator will serve as a liaison with other college faculty and administration on behalf of students with disabilities.

### 16. Academic Integrity:

- Each student enrolled in a course at NYIT agrees that, by taking such course, he or she consents to the submission of all required papers for textual similarity review to any commercial service engaged by NYIT to detect plagiarism. Each student also agrees that all papers submitted to any such service may be included as source documents in the service's database, solely for the purpose of detecting plagiarism of such papers.
- Plagiarism is the appropriation of all or part of someone else's works (such as but not limited to writing, coding, programs, images, etc.) and offering it as one's own. Cheating is using false pretenses, tricks, devices, artifices or deception to obtain credit on an examination or in a college course. If a faculty member determines that a student has committed academic dishonesty by plagiarism, cheating or in any other manner, the faculty has the academic right to 1) fail the student for the paper, assignment, project and/or exam, and/or 2) fail the student for the course and/or 3) bring the student up on disciplinary charges, pursuant to Article VI, Academic Conduct Proceedings, of the Student Code of Conduct. The complete Academic Integrity Policy may be found on various NYIT Webpages, including: <a href="http://www.nyit.edu/images/uploads/academics/AcademicIntegrityPolicy.pdf">http://www.nyit.edu/images/uploads/academics/AcademicIntegrityPolicy.pdf</a>.



### 17. 8 Week Topical Class Schedule

Week	Topic	Book Section
WK 1	Supply and Demand Analysis	Chapters 3-5
Wk 2	Cost and Production Analysis	Chapters 7 & 8
Wk 3	Market & Industry Structure	Chapters 11 & 12
Wk 4	Introduction to Econometrics: Sources of Data; Using Eviews	Chapters 1 & 2
Wk 5	Regression Methods: Simple Regression; Linear and Log Linear Models	Chapter 6
Wk 6	Multiple Regression: Variable Selection; Data Patterns; Model Selection and Evaluation; Heteroskedasticity and Autocorrelation	Chapter
Wk 7	Issues with Multiple Regression: Simultaneous Equations; Lag and Dummy Variables	Chapter
Wk 8	Final Examination Period	

### 18. Using the NYIT Library

All students can access the NYIT virtual library from both on and off campus at <a href="www.nyit.edu/library">www.nyit.edu/library</a>. The same login you use to access NYIT e-mail and NYITConnect will also give you access to the library's resources from off campus.

On the left side of the library's home page, you will find the "Library Catalog" and the "Find Journals" sections. In the middle of the home page you will find "Research Guides;" select "Video Tutorials" to find information on using the library's resources and doing research.

Should you have any questions, please look under "Library Services" to submit a web-based "Ask-A-Librarian" form.