As of 8/30

ILR 3480/ILR6480/ECON3410
Professor Ronald G. Ehrenberg
FALL 2017

ECONOMIC ANALYSIS OF THE UNIVERSITY
(MW, 10:10-11:25, Ives 115, 4 credits)

This course seeks to illustrate the complexity of decision making in a nonprofit organization and to show how microeconomic analysis in general, and labor market analysis in particular, can be usefully applied to analyze resource allocation decisions in universities. It also discusses why actual decision-making at universities may often appear to ignore economic forces. The course draws on the instructor’s more than 30 years of experience conducting research on the economics of higher education (most recently as Director of the Cornell Higher Education Research Institute (www.ilr.cornell.edu/cheri)), his experiences as Vice President for Academic Programs, Planning and Budgeting at Cornell from 1995 to 1998, and his experiences as a member of the Boards of Trustees of Cornell (2006 -2010) and the State University of New York (SUNY) (2010-2017).

Topics addressed in the course include endowment and development policies; admissions, tuition and financial aid policies; the quest for prestige, the costs of staying at the cutting edge of science; faculty compensation, the tenure system and retirement policies; capital construction, maintenance and the costs of space; graduate education, internal transfer prices, enrollment management and budget models; information technology, libraries and distance learning; nonacademic infrastructure issues such as parking and cooling the campus; intercollegiate athletics and gender equity; student dining and housing; the allocations of resources across and within departments; and diversity policies at the student and faculty levels.

Primary Course Readings The primary readings for the course are:

(Kindle editions of each of these books are available from Amazon.com)

Course Format and Requirements Lectures and discussions of the primary readings and the supplementary readings will be supplemented by a few presentations by university administrators who have been engaged in issues that are relevant to the course. The class
may be taught simultaneously to Cornell students in Ithaca and to a group of students in Washington enrolled in the Cornell-in-Washington and ILR-in-Washington programs via the videoconferencing capabilities of the classroom.

Course requirements will include a mid-term and final examination, as well as a group research project. The weights assigned to each in the computation of your final grade will be 30%, 40% and 30%, respectively. A list of learning outcomes for the class is attached and if you master them you will do well on the exams. A list of possible topics for the research project is also attached and you are asked to provide me with additional suggestions for topics by September 6. A more comprehensive list will then be circulated and groups should be formed and the research started by the fourth week of the semester. Groups are expected to meet with me at least twice during the semester to discuss the progress of their research. The first meeting must take place by Thursday October 5. My evaluation of your paper will represent 30% of your class grade so please take working on these papers very seriously.

All of the assigned reading (other than *Tuition Rising* and *Shakespeare/Einstein*, are available electronically on the Blackboard version of the course web page. Only the most dedicated student can hope to complete all of the readings and I do not expect that anyone actually will. In the list that follows I provide a brief summary of each reading. Those denoted by a * will be discussed in class so you should at least skim them.

**Office Hours:** My office is 271 Ives Hall. Office hours for the course will be Mondays from 1:00pm to 2:15pm, Wednesdays from 11:30am to 12:45pm and by appointment at other times. My assistant is Sophia Harmon. Her office is 273 Ives Hall and appointments can be scheduled with her (5-4424 or sah334@cornell.edu). Students should always feel free to contact me by telephone (5-3026) or email (rge2@cornell.edu) at any time. The TA for the class is Todd Jones (trj25@cornell.edu). His office and office hours will be posted on the blackboard course web page.

**Course Prerequisite:** The only formal prerequisite is a course in introductory labor economics (such as ILR240) or a course in intermediate level microeconomics. Students without either of these prerequisites may be admitted at my discretion. Students would benefit from having had a statistics or econometrics class before enrolling in this class.
COURSE OUTLINE AND READINGS


*Tuition Rising*, chapters 1 and 2

*Shakespeare/Einstein*, chapters 1, 6, and 7


Robert Archibald and David Feldman, “Why Higher Education Costs Rise More Rapidly Than Prices in General”, *Change* 40 (May/June 2008), 25-31 (impact of technology on costs)*


*Tuition Rising*, chapter 3


David Skorton, “Divestment: A Complicated Issue for Universities”, *Cornell Sun* (April 15, 2013) (socially responsible investment and divestment) (Google the title to obtain it)


III. The Quest for Prestige and How it Influences University Behavior: Undergraduate, Professional, and Doctoral Programs.

*Tuition Rising*, chapter 4

*Shakespeare/Einstein*, chapters 2, 3 and 5


IV. Undergraduate Tuition, Financial Aid and Admissions Policies. Why Diversity? Tuition Rising, chapter 5

Ronald G. Ehrenberg, “Wesleyan Abandons Need-blind Admissions”, Minding the Campus (www.mindingthecampus.com), September 12, 2012 (what is the gold standard for admissions and financial aid policies?)*


Carolyn Hoxby and Christopher Avery, “The Missing One Offs; The Hidden Supply of Missing High Achieving Low Income Students”, Brookings Papers on Economic Activity 46 (Spring 2013):1-65 (why are there so few top test score low income students at selective private universities)*


William G Bowen and Derek Bok, The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions (Princeton NJ: Princeton University Press, 2000): preface, chapters 1 and 10 (should we consider race and ethnicity in college admissions)


*Shakespeare/Einstein*, chapters 8 and 9


Edward Lazear, “Why is There Mandatory Retirement”, *Journal of Political Economy* 87(December 1979): 1261-1284. (A model in which mandatory retirement is optimal for both employees and employers)*


Ronald G. Ehrenberg and Liang Zhang, “Do Tenured and Tenure-Track Faculty Matter?” *Journal of Human Resources* 40 (Summer 2005): 647-659 (empirical evidence of the impact of changing faculty types on undergraduate students)*

David Figlio et. al. “Are Tenure Track Professors Better Teachers?” *Review of Economics and Statistics* 97 (October 2015): 715-724 (evidence that at Northwestern University full-time non tenure track faculty outperform tenure track faculty in introductory classes)*


VI. Faculty Compensation: Equity and Efficiency Within and Across Departments: Does Productivity Matter and How Can We Measure It? The Problem with Comparable Worth

Robert Frank, “Are Workers Paid Their Marginal Products”, American *Economic Review* 74 (September 1984): 549-571 (why the distribution of faculty salaries at a university may be less variable than the distribution of faculty productivities)*


Peter Crosta and Iris Packman, “Faculty Productivity in Supervising Doctoral Students at Cornell”, *Economics of Education Review* 24 (February 2005): 55-65 (how faculty productivity in supervising PhD students varies over their life cycle)*

Ronald G. Ehrenberg, Marquise McGraw and Jesenka Mrdjenovic, “Why Do Field Differentials in Average Faculty Salary Vary Across Universities?” *Economics of Education Review* 25 (June 2006): 241-248 (faculty productivity, as measured by rankings, matters)*

**VII Faculty Issues Relating to Gender Race and Ethnicity: Diversity, Female and Underrepresented Minority Doctorates, Comparable Worth Revisited, Women’s Choice of Fields and Institutional Types**


Mary Ann Mason and Mark Goulden, “Do Babies Matter (Part II)? *Academe* 90 (November/December 2004): 11-16 (evidence on gender issues at research universities that influence female faculty) (CUE)*


Wendy Williams and Stephen Ceci, “National Hiring Experiments Reveal 2:1 Faculty Preferences for Women on STEM Tenure Track”, *Proceedings of the National Academy of Sciences* (forthcoming) (what’s the experimental evidence on gender preferences?)

Ronald G. Ehrenberg et. al., “Do Trustees and Administrators Matter? Diversifying the Faculty Across Gender Lines”, *Economics of Education Review* 31 (February 2012): 9-18 (the gender of leaders influences how rapidly we diversify the faculty across gender lines)


Tuition Rising, chapters 6 and 7

Shakespeare/Einstein, chapter 11

Ronald G. Ehrenberg, Michael J. Rizzo and George H. Jakubson, “Who Bears the Cost of Science at Universities”, in Paula Stephan and Ronald Ehrenberg eds. Science and the University (University of Wisconsin Press, 2007): 19-35 (empirical evidence on the impact of internal expenditures on research on tuition, faculty student ratios and faculty types)*

2012-2013 Cornell University Operating and Capital Budget Plan (May 2012), p.21-22 (available at http://dpb.cornell.edu) (the CU Tech campus)

IX The Cost of Space

Tuition Rising, chapters 10 and 11


2013-14 Cornell University Financial Plan: Operating and Capital (May 2013), pages 38-39 and 80-87 (available at http://dpb.cornell.edu) (data on how Cornell’s space has changed over time and how space planning works at the university today including “selling” and “renting” space across units)*


Ronald G. Ehrenberg ed., Governing Academia, chapter 8, 222-232 (collective bargaining issues)

*Tuition Rising*, chapters 12 and 13


Ronald G. Ehrenberg and Douglas Webber, “Student Service Expenditures Matter”, *Change* (May 2010) (are student service expenditures frills or necessities?)

XII Information Technology, Libraries, Interactive Learning, and MOOCs

*Tuition Rising*, chapter 14

*Shakespeare/Einstein*, chapters 8, 9, and 10


David Figlio et. al. “Is it Live or is it Internet? Experimental Estimates of the Effects of Online Instruction on Student Learning”, *Journal of Labor Economics* 31 (October 2013): 763-785 (random assignment to attending lectures or watching them over the Internet)


XIII Nonacademic Infrastructure and Student Services Issues: Cooling a Campus and Parking. Cornell’s Climate Action Plan

Tuition Rising, chapters 15 and 16

Cornell’s Climate Action Plan
(www.sustainablecampus.cornell.edu/cap/cornellscommitment.cfm)

XIV Intercollegiate Athletics and Gender Equity

Tuition Rising, chapter 17


XV Student Issues: Housing and Dining

Tuition Rising, chapter 18

XVI Concluding Thoughts

Ronald G. Ehrenberg, “Last Lecture” (June 2009) *

Ronald G. Ehrenberg, “Is the Golden Age of the Private Research University Over?” Change Magazine (May/June 2013)*

Tuition Rising, chapters 19 and 20

Shakespeare/Einstein, conclusion
REVISED CLASS SCHEDULE (8/30)

The Schedule below lists the topics to be covered each day and the dates for guest lectures. The class normally meets on Monday and Wednesday mornings. However, some meetings (in bold and in RED) are scheduled to compensate for days that I have to cancel class (also in bold and RED). Dates with guest speakers are also in bold and in RED.

Wed. 8/23 Introduction (I)
Mon. 8/28 Introduction and Endowments (I, II)
Wed. 8/30 Endowments, Investment and Spending Policies (II)

Mon. 9/04 No Class Labor Day
Wed. 9/06 Quest for Prestige (III) (students submit possible additional paper topics)
Fri. 9/08 (List of additional paper topics posted by me)

Mon. 9/11 Tuition, Financial Aid and Admissions Policies (IV)
Wed. 9/13 Tuition, Financial Aid and Admissions Policies (IV)(students submit paper topics and groups to my assistant (sah334))
Fri. 9/15 Faculty Compensation and Tenure (V) (Make Up Class)

Mon. 9/18 Faculty Compensation and Tenure (V)
Wed. 9/20 No Class Instructor Away

Mon. 9/25 Faculty Compensation, Equity, Efficiency and Productivity (VI)
Wed. 9/27 Faculty Gender, Race and Ethnicity Issues (VII)

Wed. 10/02 Vignettes Dealing with Leadership Issues in Higher Education
Wed. 10/04 Midterm Exam (covers section I-VI)

Mon. 10/09 No Class- Fall Break
Wed. 10/11 The Cost of Science (VIII)

Mon. 10/16 The Costs of Space (IX)
Wed. 10/18 Doctoral Education (X)

Mon., 10/23 Resource Allocation – Internal Transfer Prices/New Budget Model (XI)

Mon. 10/30 Mary Opperman, VP and Chief HR Officer
Wed. 11/01 Inf. Tech., Libraries, Online Learning and MOOCs (XII) (may need evening class)

Mon. 11/6 Kevin Hallock, Dean of ILR
Wed. 11/08 Fred Van Sickle, VP for Alumni Affairs and Development
Fri. 11/10 Nonacademic Infrastructure- Cooling and Heating a Campus and Parking (XIII)

Mon. 11/13 Martha Pollack, President
Wed. 11/15 No Class Instructor Away
Fri. 11/17 Papers Due

Mon., 11/20 Intercollegiate Athletics and Student Dining and Housing (XIV, XV)
Wed., 11/22 No Class Thanksgiving Break

Mon., 11/27 Student Presentations
Wed., 11/29 Student Presentations/ Concluding Comments (XVI)

Notes
(1) Research Groups must hold their first meetings with me during the September 25 - October 12 period and then immediately start work on their papers. Groups should consult with me throughout the semester regularly (at least one more time is a requirement).
(2) The final exam date, is Saturday December 9th at 2:00 pm (location will be announced later).
(3) Tables and Figures associated with most lectures can be found at [http://faculty.cit.cornell.edu/rge2](http://faculty.cit.cornell.edu/rge2), (click on classes and then on ILR6480) or on the blackboard course web page. Most reserved readings are found only on the latter.
Learning Outcomes

By the end of the semester you should be able to

1. Understand the complexity of the American Higher Education system
2. Understand the broad categories of current account expenditures and revenues and the difference between the university’s current and capital accounts
3. Explain how the quest for prestige influences institutional decision making
4. Explain why private universities can’t hold down their costs and why tuition keeps rising by more than the rate of inflation each year
5. Explain why the “public” part of Cornell keeps increasing the share of its undergraduate students from out of state
6. Explain how systems of governance and budget structures influence university behavior
7. Employ utility maximizing models to explain various observed behaviors
8. Explain how universities develop endowment spending rules and why spending rates vary across universities
9. Explain why some universities have need-based financial aid policies but others do not and how decisions on how to structure financial aid policies are made
10. Explain how the USNWR rankings and other ranking systems influence university behavior
11. Explain why the number of student organizations keeps increasing almost exponentially at Cornell
12. Explain how universities determine their faculty salary policies and the costs and benefits of the tenure system
13. Explain the growth in non tenure track faculty
14. Discuss how faculty productivity might be measured and the costs and benefits of basing salary decisions on faculty productivity
15. Explain why faculty salaries differ across disciplines and what the impact would be of trying to standardize faculty salaries across disciplines
16. Understand why females and people of color are under represented in faculty positions in research universities and discuss reasons for this other than discrimination
17. Explain why sometimes relative costs don’t seem to matter in decision making in higher education but other times they do
18. Explain why universities keep investing in science even as the cost of doing research in science is exploding
19. Explain why no one at the university has enough space and why we don’t price space to conserve on its use
20. Explain why undergraduates should care about doctoral education and understand why times to degree and completion rates in doctoral education vary across fields and universities
21. Understand the role of internal transfer prices in influencing decision making at universities and how average cost pricing can lead to educational decisions that are not optimal
22. Understand possible reasons that grades and grade inflation vary across fields of study at the university
23. Understand why what is best for the information technology division of a university may not be what’s best for the university
24. Explain why libraries don’t cancel all their hard copy subscriptions and order only electronic copies of journals
25. Explain why some decision making at universities appears to be based upon rational economic calculations (cost/benefit analysis, the price system) but other decisions do not appear to based on these factors
26. Explain why Cornell’s recent success in Ivy League athletics may be an aberration and why we may well slip back to the middle of the pack in our teams’ records
27. Explain why universities tend to increase spending on athletics in response to gender equity legislation even though they are not required to do so
28. Explain why housing and dining were not truly “responsibility centers” under the Cornell budget model that existed until 2013-14 and why their pricing decisions influenced the rest of the university.
29. Explain how ethical considerations enter into university decision making.
30. Understand how Cornell got into its current financial situation and how the university is trying to get back to financial equilibrium
31. Explain why spending on building maintenance always has lowest priority at the university and why the trustees are the group that must argue for maintenance spending.
32. Generalize what you have learned about university behavior to the behavior of other non-profit institutions.
The Research Paper

A major requirement for this course is the preparation of a research paper. My preference is for papers to be analytical studies of a topic that collect data from primary or secondary sources, and then analyze these data using some statistical methods. However, you are free to work on whatever topic you choose, using whatever methodologies you prefer. You can do this paper in a group three to four students.1 The last week of the class will be devoted to brief presentations of some of these papers.

I have listed below some examples of possible research topics. These are topics that I find of some interest and/or on which past groups of students have prepared papers for me. However, there is no reason for me to suspect that you will necessarily find any of them interesting or want to work on them. In the past the best papers that have been done are often ones in which students choose their own topics.

As such, I would like each of you to email me additional topics that you think would be interesting to study by September 6. I will post on the course web page an additional list of topics by September 9. I would then like you to email me by September 13 the topic that you wish to study. If you know which other students you would like to work with, you may submit me one response indicating who the members of the group are. I will then post on the course web page by Friday September 15 the topic that each of you will be working on. For those of you who have not indicated specific people you want to work with, you can see who else wants to work on the same topic. You can contact those people and decide whether to form a group with other singleton or join an existing group.

Each individual or group must meet with me during the September 25th – October 12th period so I can suggest directions in which you might go and we can agree on what the paper will be. I am at times away from campus so make your appointments early with Sophia Harmon. It is in your best interest to meet with me periodically during the semester to let me know how you are progressing. I expect that each group will meet with me at least twice during the semester and will penalize groups that fail to do so. The papers are due on Friday November 17th. However, I encourage you to show me preliminary drafts or at least preliminary empirical results before then so I can give you comments that will help you prepare a final draft.

Most of the projects described below involve analyses of secondary data and are not subject to human subjects review requirements. Some, as well as some that you may propose to undertake, will require you to interview students or faculty and staff at Cornell and these are subject to human subjects review. When you discuss your research projects with me, I will inform you if you need to undertake human subjects research training. For information on human subjects review and the training process, see www.irb.cornell.edu.

Some students in previous years have complained that some of their group members did not put forth real effort on the project. To discourage people from behaving like ‘free riders”, I may ask you each to let me know if there are members of your group who behaved this way. If more than one group members mentions another member, I would then deduct three points from the latter person’s paper grade.

1 Because of the size of the class group sizes should be at least three. Exceptions will be rarely granted and only after discussions with me.
Examples of Research Topics

1. What has the impact of faculty unions been on the salaries and benefits of faculty and on student/faculty ratios?

2. What determines how close an academic institution is to gender equity in its athletic program?

3. Why does the male professor/female professor average salary ratio vary across academic institutions?

4. Do winning records enhance attendance at Cornell sporting events?

5. What’s the economics of non-teaching academic units, such as the Cornell University Press, the Cornell Art Museum, or Residence Life?

6. Do changes in rankings of professional programs (law, MBA) influence the subsequent admissions’ success of the programs?

7. Why does the fraction of out of state students vary across public universities?

8. Why has there been a proliferation in the growth of student organizations at Cornell? What are the costs and benefits of this growth?

9. How does the research productivity of Cornell professors, as measured by citations, vary across faculty members in economics (or insert your own field of study)? How does faculty members’ research productivity vary by age?

10. Faculty/student ratios vary widely across colleges and universities in the United States. Economic theory suggests that, holding all other factors constant, higher faculty salaries should be associated with lower faculty/student ratios. Does this relationship exist?

11. Why do 6-year graduation rates vary across academic institutions?

12. Why does the proportion of graduates of an institution that later receive PhDs vary across institutions at a point in time?

13. Why do faculty salaries vary across faculty members at various universities (information on salaries for every faculty member at a number of public universities is available on line)?

14. Why does the gender mix of faculty vary across universities?
15. Why do alumni giving rates vary across colleges and universities?

16. Why does the percentage of students in Greek life vary across institutions?

17. An economic analysis of Greek life at Cornell (costs and benefits to the institution and to students). Or a narrower question such as why do occupancy rates vary across Greek houses at Cornell?

18. Why does the share of transfer students vary across institutions?