



## **BOSTON UNIVERSITY**

Department of Economics

### **CAS EC 385: Economics of Sports**

Prerequisites: EC201 and EC203 (or the equivalent)

Course Description: This course is an applied microeconomics course which explores various aspects of the economics of sports and sports leagues, with a strong emphasis on empirical analysis. Sports markets have also become a subject of increasing interest to economists, both due to the unique quality of the available data (e.g. highly detailed data on player productivity) and the opportunity for applying and testing microeconomic theories. This course will explore selected aspects of the economics of the sports. We will begin with a focus on understanding professional sports franchises as businesses: What factors determine franchise profitability and how does this affect owners' decision making? The next part of the course will look at the economics of leagues and sports stadiums. What is the optimal design of a sports league? What role do antitrust laws play in the design of a sports league? Is competitive balance (i.e., an optimal level of competition which is in the interest of the league) important to a league's success? Questions of local public finance will then be addressed: Why have most new (and proposed) professional sports stadiums been heavily subsidized by governments and taxpayers? Do franchises and the new stadiums that often follow benefit the local economy? Finally, the economics of professional sports labor markets will be explored. What determines the salaries of professional athletes, both domestic and foreign? To what extent is discrimination a factor, and what is the source of this discrimination (owner based versus fan, or customer based)? How does the productivity of teammates affect both pay and performance? How is pay affected by market structure and what are the implications for franchise profitability in different kinds of markets? Throughout, microeconomic theory and econometric methods will be applied to answer these and related questions.

Course Web Site: All course documents and announcements will be posted on the course Blackboard website.

Text: *The Economics of Sports*, by Leeds and von Allmen (published by Pearson Addison Wesley). The text is available at the BU Barnes & Noble Bookstore.

Attendance: *Students are expected to attend all lectures.* If you miss class you are responsible for getting lecture notes from your classmates. The structure of knowledge in economics is strongly hierarchic in that each successive lecture tends to build on prior material in a rather systematic fashion. As such it is very easy to fall behind if you miss a class and do not study the missed material *before* the subsequent lecture.

Class Preparation and Participation: The best way to learn the material (in addition to solving problems) is to read the assigned chapters *before* the lecture, to ask questions *during* the lecture, and then to look over the chapter again and your notes *after* the lecture

Grades: Course grades will be based on two midterm exams (25 points each), and a *cumulative final exam* (50 points).

Exams: Exams will be based on problems similar in nature to those assigned in your problem sets, plus short essay questions based on the text, articles, and lectures. If a student scores higher on the final exam than on a midterm, that midterm grade will only count for 10 points and the final exam will count for the additional points. For example, the course score for four different hypothetical students would be:

|             | <u>Midterm1</u> | <u>Midterm #2</u> | <u>Final Exam</u> | <u>Final Course Score</u>  |
|-------------|-----------------|-------------------|-------------------|----------------------------|
| Student #1: | 70              | 85                | 90                | .1(70) + .1(85) + .8(90)   |
| Student #2: | 70              | 85                | 60                | .25(80) + .25(85) + .5(60) |
| Student #3  | 70              | 85                | 80                | .1(70) + .25(85) + .65(80) |
| Student #4  | 90              | 70                | 85                | .25(90) + .1(70) + .65(85) |

Makeup exams: There will be no makeup exams for the two midterms. If you miss a midterm due to a documented medical emergency, then the points for that midterm will be added to your final exam. Also, please note that under no circumstances will the final exam or midterms be administered on a different date than scheduled because of travel plans or family events (if, though, there is a family medical crisis, you should contact me about this immediately so that arrangements may be made). Any changes to an announced exam date, time, or place will be announced in class and posted on the course website (it is the responsibility of the student to be aware of these changes). If a student misses the final due to a documented illness I must be contacted on the day of the exam and every effort must be made to take the makeup final exam as soon as possible (furthermore, no other exams may be taken before the makeup exam for this course is taken, unless you first secure my approval to do so). If a student returns home without first contacting me, no makeup will be given and s/he will receive a zero on the final exam.

Problem Sets: Problems from the text will be periodically assigned (and posted on the course site). Select problems will be solved in class, but solutions to all assigned problems will also be posted on the course website. I strongly suggest that you form small study groups to work on the problems. The problems are designed to help you understand the course material. Students are not required to hand in solutions to the problems, but do note that working on the problems is very useful for learning the course material and performing well on the exams. Please keep in mind that solving problems is very different from understanding the solutions.

Computers in Lectures: I do not allow students to use computers during lectures unless you have a documented learning disability that requires the use of computers (if so, please contact me before the start of the term and provide me with appropriate documentation). There is a growing body of evidence suggesting that the use of computers in the classroom has, on balance, a negative effect on student learning. These reasons include, 1) a tendency for students to check email and to connect to sites having nothing to do with the class, distracting both themselves and other students around them (an example of a negative externality), and 2) studies indicating that writing out notes on paper (or a tablet) improves learning, including the ability to better copy down graphs and mathematics.

Students with Documented Disabilities: If you have a disability that necessitates extra time for exams, or any other accommodations, you will need to give me a note from the BU Office of Disabilities Services so that I can make arrangements.

Policy on Cheating: Cheating on exams will result in a zero grade for the exam (and this grade will count in the final course grade calculation regardless of the grade on the final) and will be reported to the Dean's office. In this regard it is important to remind everyone that students are responsible to know and understand the provisions of the CAS Academic Conduct Code.

## **Course Outline**

### I. The Economics Analysis of Sports: A Review of Key Microeconomic Concepts and Empirical Methods (developed throughout in the context of sports examples)

Readings: Leeds and von Allmen, Chapters 1 & 2 (including the appendices)

### II. The Industrial Organization of Sports

Readings: Leeds and von Allmen, Chapters 3 (Sports Franchises and League Structure) & 4 (Antitrust and Monopoly)  
Krautmann, Anthony and David J. Berri, "Can We Find It at the Concessions? Understanding Price Elasticity in Professional Sports." *Journal of Sports Economics*, 2007.  
Kahane, L. and S. Shmanske (1997) "Team Roster Turnover and Attendance in Major League Baseball," *Applied Economics*, 29(4), April 2007

### \*\*\*\* **MIDTERM EXAM #1**: \*\*\*\*

### III. Competitive Balance

Readings: Leeds and von Allmen, Chapter 5  
Simon Rottenberg, 1956. "The Baseball Players' Labor Market," *Journal of Political Economy*, University of Chicago Press, vol. 64  
Rodney Fort, "The Golden Anniversary of 'The Baseball Players' Labor Market,'" *Journal of Sports Economics*, November 2005.  
Zimbalist, A. S., "Competitive balance in sports leagues: An Introduction," *Journal of Sports Economics*, May 2002.

#### IV. Public Finance and Sports

- Readings: Leeds and von Allmen, Chapters 6 (The Market for Teams) & 7 (Costs and Benefits of a Franchise to a City)  
John Siegfried and Andrew Zimbalist, "The Economics of Sports Facilities and Their Communities," Journal of Economics Perspectives," 2000, vol 14, issue 3.  
John Siegfried and Andrew Zimbalist, "A Note on the Local Economic Impact of Sports Expenditures Journal of Sports Economics," November 2002.  
Baade, Robert A., Baumann, Robert, and Matheson, Victor, "Selling the Game: Measuring the Economic Impact of Professional Sports Through Taxable Sales," Southern Economic Journal, Vol. 74:2 (October, 2007),

\*\*\*\* **MIDTERM EXAM #2:** \*\*\*\*

#### V. The Labor Economics of Sports

- Readings: (1) Leeds and von Allmen, Chapter 8 (Wage Determination and Labor Supply)  
Gerald Scully, "Pay and Performance in Major League Baseball, American Economic Review, December 1974.  
Todd Idson and Leo Kahane, "Team Effects on Compensation: An Application to Salary Determination in the National Hockey League," Economic Inquiry, April 2000.
- (2) Leeds and von Allmen, Chapter 9 (Labor Relations)  
Andrew Zimbalist, "Labor Relations in Major League Baseball, "Journal of Sports Economics, November 2003
- (3) Leeds and von Allmen, Chapter 10 (Discrimination)  
Lawrence Kahn and Peter Sherer, "Racial Differences in Professional Basketball Players' Compensation, Journal of Labor Economics, January 1988.  
Lawrence Kahn, "Discrimination in Professional Sports: A Survey of the Literature," Industrial & Labor Relations Review, April 1991.  
Richard Burdekin and Todd Idson, "Customer Preferences, Attendance and the Racial Structure of Professional Basketball Teams," Applied Economics, vol. 23(1), 1991.

#### VI. Amateur and College Sports

- Readings: Leeds and von Allmen, Chapter 11  
Lawrence Kahn, "Cartel Behavior and Amateurism in College Sports," Journal of Economics Perspectives, Winter 2007.

\*\*\*\* **FINAL EXAM: last lecture period** \*\*\*\*