Department of Economics UNIVERSITY OF TORONTO

ECO 353H1-F

Special Topics with Data: Sports Economics

Fall 2025

COURSE DESCRIPTION

This applied economics course explores various aspects of the economics of sports and sports leagues, including both theoretical and empirical analysis. We will consider a number of topics, including:

- The business of professional sports: how do teams and leagues make money?
- Analysis of leagues' competitive balance policies
- Player relations issues including analysis the drivers of players' salaries
- The relationship between college and professional sports

Instructor: Laura Turner

Email contact: lmf.turner@utoronto.ca. Please email me at this address (not through Quercus!) from your U of T e-mail account and make sure ECO 353 is in the subject line.

TA and TA contact: Hale Nur Kazaçesme <u>halenur.kazacesme@mail.utoronto.ca</u>

Class: Monday 10am–1pm in EM 001 (75 Queen's Park Crescent East)

Office Hours: After class on Mondays in EM 001 (or just outside) and in GE 313 from 2:30pm-3:30pm. If you can't make it live, you can zoom: https://utoronto.zoom.us/j/81839317381 Passcode: 656963

COURSE MATERIALS

- 1. Berri, David, Sports Economics. New York: Worth, 2018.
- 2. Additional readings provided as e-resource links via Quercus throughout the semester.

ECO 353 follows Berri's text reasonably closely, with some supplemental material and some omissions. Berri's text can be puchased as an e-text (reccomended) as an e-text from Vitalsource here, it is \$87 as a six month rental. Although the text is technically required, and fairly cheap to rent puchase as an e-text, you do not *absolutely* have to buy it to do well in the class. Just remember that Berri is one of the foremost experts in sports econ and you may find his perspective as a useful contrast/companion to mine.

Additioinal relevant readings that are referred to in the lectures and tutorials will be provided via Quercus as we go through the class, but these are optional in that your knowledge of them does not need to surpass what is dicussed in class, though you may find them useful references for your projects.

I will not assign the end of chapter problems from Berri's text, but **two problem sets** will be made available throughout the course to help you prepare for the exam, especially for those who don't opt to compete all the data projects. The problem sets will be posted in Week 4 and Week 10.

COURSE TOPICS AND SCHEDULE

Each week we will cover between 1.5 to 2 hours of lecture content, followed in some weeks by a data tutorial/demonstration. (Tutorial weeks will require all three hours of class; non-tutorial weeks only two or slightly over two hours. Our first class will take about 2.5 hours, since the first 45 minutes will be dedicated to the course introduction) I will post the lecture slides and/or tutorial material for the week on Sundays before the Monday class. The tutorials are mainly to help you prepare your data assignments and will cover regression in R and excel, data collection from relevant sports databases, calculation of player impact metrics, and some technical concepts covered in the class including analysis of regression output tables. Some of the empirical demonstations/ tutorials may be uploaded as videos to Quercus as online asynchronous content if we don't have enough time in class.

A "week" in ECO 353 starts the Sunday before the lecture. The approximate schedule is:

Week 1:. Introduction; Professional Sports as a Consumer Good (Class: Sep 8th)

Week 2: Sports Teams as Monopolists (Class: Sep 15th)

Week 3: Lecture: Profit vs. Wins; Tutorial: Market Size and Wins (Class: Sep 22rd)

Week 4. Lecture: Competitive balance; Tutorial: Sample Project on Determinants of NHL Revenue (Sep 29th)

Week 5: The Economics of Professional Sports Outside North America (Oct 6th)

Week 6: The Economic Value of Athletes I (Oct 13th) Note: No class due to Thanksgiving, so this lecture is provided in online asynchronous video.

Week 7: Lecture: The Economic Value of Athletes II; Tutorial: Computing a Baseball Player's MRP (Oct 20th)

STUDY BREAK: NO CLASS OCT 27th

Week 8: Lecture: Analytics; Tutorial: Computing MRP from Player Stats (Class: November 3rd)

Week 9: How Athletes Actually Get Paid: Labour Negotiations in Sports (Class: Nov 10st)

Week 10: Moneyball and its Legacy (Class: Nov 17th)

Week 11: Moneyball and Discrimination (Class: Nov 24th)

Week 12: Women's Sports and the Case of the WNBA (Class: Dec 1st)

COURSE EVALUATION

Students can choose their own evaluation scheme as described below. The evaluation will be based on a combination of (up to) three empirical assignments (projects) and an exam.

- 1) Three data analysis projects worth 30% each, due at 11:59 Saturday at the end of Week 5 (i.e. **Oct 11**th), Week 8 (i.e. **Nov 8**th), and Wednesday of Week 12.(i.e. **Dec 3**rd).
- 2) Final Exam 10%-70% Date TBD, after December 4th

You must complete at least one of the first two data projects, due in Week 5 and Week 8. You may complete one, two or all three projects in total. If you complete all three data projects, your exam will count for only 10% of your grade. If you complete two projects, the exam will count for 40%. If you complete one (which must be either the first or second projects, due in Week 5 and Week 8), the exam will count for 70%.

Note that, if you submit one of the projects and we grade it, it couts! We will not reallocate marks from bad, graded, submitted projects to the exam. However, if you submit a project and immediately regret it, just let the instructor know by email and we won't grade it, instead reallocating the marks to the exam.

Data Projects:

The first data project will involve investigating the determinants of revenue, demand, or another economic outcome within a given sports league and time frame, and using this analysis to assess the economic prospects of a specific team. A "sample project" is presented in the second data tutorial in class using by-hand data collection and analysis in R. The second project will involve calculating the economic value of a professional athlete using methods covered in the course. We will also see examples of how to do this in our second set of tutorials in Weeks 7 and 8. The third project is an "open project" on a course-related empirical question of your choice that you can discuss with the instructor. It can also, but doesn't need to, involve revisiting your work from Project #1 or Project #2 to respond to feedback or expand/improve the analysis. You can only complete the third project if you have completed at least one of the first two projects. Completing one of the first two projects is mandatory in the course.

The course empirical resources will be provided in R and Excel as appropriate. It is not mandatory for you to use either of these softwares for your projects (for instance, if you are already familiar with Python, that's fine to use instead of R), but most students find it easiest to use a combination of Excel and R for empirical analysis in ECO 353 to align with the presentation materials.

For the data projects, group work is allowed (not required) but groups must be formed and approved in advance of the due date. You can choose to work alone or in a group of two or more. There is no penatly for working in a group of two. However, groups of more than two members will receive -3 off the top of their assignment (out of 100) for every additional group member beyond 2. Details of the projects will be posted three weeks before each project due date.

MISSED OR LATE WORK POLICY

Generally speaking, no formal extensions on any of the projects will be granted for any reason; late marks accrue at the rate of -0.5 points out of 100 off the top for every hour a project is late. (This means submitting a couple of hours late is not a big deal, but submitting 3 days late will seriously hurt your grade.) If you find you are sick or have an emergency or are simply overwhelmed the week before the due date, **simply skip the project and reallocate the marks to your exam**. If you are part of a group and find you can't complete your part of the project, make sure to let your group members or teammate know in advance so they can cover for you. It's up to individual groups to coordinate to make the assignment deadlines collectively.

The only exception to the late assignment policy above applies to students with accommodations through Accessibility. Accessibility accommodations for any group member will apply to the entire group. However, these accommodations must be cleared and agreed to with the instructor near the start of semester (i.e. within the first few weeks of class) and an alternative timeline agreed to, which is then binding. Accommodation requests made the night before an assignment is due will be rejected for the current assignment.

If you miss the final exam in this course for a legitimate reason (illness, etc) you will need to

contact your College Registrar to file a petition for a deferred exam. This deferred exam will be written at a later date as established by the Faculty of Arts & Science. Instructions can be found here: https://www.artsci.utoronto.ca/current/faculty-registrar/petitions-appeals/preparing-petition.

USE OF GENERATIVE AI

Students should feel free to make use of LLM or similar generative AI programs, such as ChatGPT, Microsoft Copilot, or Gemini, to help write code for the data projects. LLMs are great for coding, especially for people working in a new language, which R is likely to be for many of you.

However, any use of generative AI programs must be properly cited. For information on proper citation, many organizations that publish standard citation formats are now providing information on citing generative AI (e.g., MLA: https://style.mla.org/citing-generative-ai/). You should avoid asking an LLM to help write your project text. Even very "smart" LLMs tend to write bad, banal analyses of model output. Obvious use of generative AI without ackowledgement will result in a failing grade (possibly a zero depending on the egregiousness of the offense) on the project in question.

PLAGIARISM DETECTION

Students will be required to submit their projects to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. This is done automatically by Quercus and doesn't require any additional effort on the students' part. In doing so, students will allow their projects to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the University's Plagiarism Detection Tool FAQ page from Centre for Teaching Support & Innovation.

Note that data files and code submitted with the projects return high similarity scores. This is not a problem! Only your written reports should return reasonably low (<25% typically) similarity scores with previously submitted work.

STATEMENT ON EQUITY, DIVERSITY AND INCLUSION

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

COMMITMENT TO ACCESSIBILITY

The University is committed to inclusivity and accessibility, and strives to provide support for, and facilitate the accommodation of, individuals with disabilities so that all may share the same level of access to opportunities and activities offered at the University.

If you require accommodations for a temporary or ongoing disability or health concern, or have any accessibility concerns about the course, the classroom or course materials, please <a href="mailto:emailto: