

**University of Waterloo**  
**Department of Economics**  
**ECON 254-041: The Economics of Sport**  
**Course Outline – Winter Term 2021**

**Instructor Information**

**Instructor:** Corey Van de Waal

**Office:** HH 103 (working from home).

**Website:** <http://economics.uwaterloo.ca/corey-van-de-waal>

**Facebook page:** <https://www.facebook.com/accidentaleconomist/>

**Class Meets:** online.

**Classroom:** online.

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When sending email to your instructor, always use your University of Waterloo email account. "ECON 254" and your section number (e.g. ECON 254-041) must appear in the subject line and the message must include your *full name and student ID number*.

**Office Hours and Other Support Resources**

**Virtual Office Hours:** Thursdays from 11:15am – 12:15pm (Weekly beginning January 14<sup>th</sup> and ending April 8<sup>th</sup>). No virtual office hours will be held on April 1<sup>st</sup>.

Office hours are the appropriate venue for asking questions about the material from the course. Email is an inefficient method for communicating detailed course content, and I will not respond to detailed questions regarding the material other than during the virtual office hours.

Where to find this course outline:

This course outline is available at two locations for the duration of the term:

- Department of Economics website <http://economics.uwaterloo.ca>
- LEARN web site (requires UW user id and password) <http://learn.uwaterloo.ca>

**Brief Summary**

The course will develop fundamental economic concepts in the context of the sports industry. We will limit our attention primarily (but not exclusively) to the consideration of the four major North American leagues: the NHL, NBA, NFL and MLB.

The course is divided into five major sections.

First, we will familiarize ourselves with the economic size of the sports industry and consider some of the history of the four major North American sports. We review the demand and

supply model in the sports context. It is essential to develop the economic toolbox necessary for use in the subsequent course materials.

In the second section of the course, we investigate potential methods for modelling sports performance. The analytics portion of the course begins with a study of econometric methods followed by performance measures, profit maximization, and game theory.

Next, we will consider some of the fundamental aspects of the business of sports. The business structure of several sports is discussed and we introduce fantasy sports, sports betting, and e-sports. The section ends with an investigation of competitive balance and competitive balance measures.

In the penultimate section, we will examine the labour economics of sports, focusing on the labour-leisure model, unions, and collective bargaining.

Finally, we will briefly examine the public economics of sports. We will look at how and why cities spend public money on professional sports teams.

**Prerequisite:** ECON 101.

### **Course Goals and Learning Objectives**

At the end of the course, students should be able to

- apply elements of microeconomic theory to understand how consumers and producers make rational decisions in the sports industry;
- apply theoretical understanding to problems faced in sports markets;
- use applied economic techniques to analyze conceptual problems faced by agents in sports markets.

### **Textbook, Coursenotes, and Other Resources**

#### **LECTURE SLIDES**

I will be posting summary notes relating to each week's lecture material on LEARN. These notes are intended to briefly highlight key learning objectives. Your main source of study material will be the textbook and the lecture slides.

#### **REQUIRED TEXTBOOK**

Van de Waal, Corey. *Economics and the Sports Industry: Theory and Applications*. Dubuque: Kendall Hunt Publishing, 2021.

Examinations in this course are based on the material contained in the textbook readings and presented as lecture content (which are all strong complements, not substitutes...see Policy on Virtual Class Attendance).

## Readings Available on LEARN

As mentioned, I will be posting the lecture slides on LEARN before each class. It is your responsibility to keep yourself current with the assigned textbook readings as well as maintaining an understanding of the lecture slide content.

- Any additional course materials (news, updates, announcements) will be posted on the LEARN web site <http://learn.uwaterloo.ca>
- The LEARN site is down occasionally. Save the course materials to your computer as soon as they are posted. Always be prepared!
- Students writing test and exams are responsible to save course materials on LEARN before the access to their courses is shut off (normally on the first day of classes of the next term).

## Course Requirements and Assessment

The two individual assignments in this course will collectively be worth **40% (20% each)** of your final grade. The midterm will be written on the date specified below and the results will be worth **25%** of your final grade. The final exam will constitute **35%** of your final grade and will be comprehensive (i.e. cover all course material from beginning to end).

The course grade will be based on the weighted sum of the two assignments, the midterm exam, and the final examination which will be held during the Official Examination Schedule. The breakdown is as follows:

Assessment	Date of Evaluation	Weighting
Assignment 1	February 26	20%
Assignment 2	April 9	20%
Midterm	February 22	25%
Final Exam	TBA (April 17 – 26)	35%
<b>Total</b>		<b>100%</b>

### Notes

- The format for the midterm and the final exam will be a potential mix of multiple-choice questions and written problems.
- The final exam period for the Winter Term 2021 is April 17 - 26 inclusive. Students are expected to be available during this time. Travel plans are not acceptable grounds for granting an alternative final examination time. <http://uwaterloo.ca/registrar/final-examinations/examination-regulations-and-related-matters>
- The exact date and time for the final exam for this class will be determined by the Registrar's Office. The exam schedule will be posted online and posted on LEARN.
- Only the Registrar's Office can issue final grades.

This grading scheme will be implemented strictly for all students in the course (with the exception of verified illnesses – see below).

## **Examination Policy**

### *Missing a Midterm Due to Illness during the Term*

- Missing a midterm will automatically result in a grade of zero for that midterm. If the illness can be documented with a UW Verification of Illness Form (the only acceptable document), with approval you may transfer the weight of the missed midterm to the final exam. This remedy is a privilege and not a right.
- The midterm exam schedule has been set and will not be changed for whatever reason (no make-up midterm exams will be offered).

### *Missing the Final Exam Due to Illness*

- Missing the final exam is a very serious matter which automatically results in a grade of zero for the final exam and possibly a failing grade for the course. Please carefully read the Economics Department policy on deferred final exams for instructions.
- No deferred final exam will be provided for students who missed all the exams (including the final exam) in this course.

### *Submission of Exam Papers*

- Late submission of exam papers is not accepted and missed submissions will receive a zero mark for whatever reason.
- Exam papers must be submitted in whole and on time. Exam papers  
(a) not submitted on time,  
(b) submitted with missing pages,  
(c) submitted elsewhere, with the exception of students with permission to write in the AS Office,  
(d) not received at all  
will receive a grade of zero for whatever reason.
- It is the responsibility of students to ensure that they write exams in the location, date, and time assigned to their section. Students writing exams in the wrong section will be assessed a 20% penalty on the final exam grade. There will be no accommodation for possible differences in exam material or content.

### *Policy on Missed/Late Assignments and Tests*

Any assignment that is not submitted by the date and time at which this assignment is due will not be marked and will receive a grade of zero. If you miss that lecture due to illness and therefore cannot submit your assignment, it will be accepted for grading if and only if accompanied by a relevant medical certificate.

No make-up tests will be provided for the midterm exams. Students who miss a midterm and do not have a relevant medical certificate will receive a mark of zero. Students with a valid medical certificate will have the weight of the relevant midterm added to their final exam. If a student misses the final exam, the resulting procedure is outlined in the Economics department's Deferred Final Exam Policy, <https://uwaterloo.ca/economics/undergraduate/resources-and-policies/deferred-final-exam-policy>

## Topics covered

- Toolbox Development
- Sports Analytics
- The Business of Sport
- Labour Economics in Sport
- Public Policy Issues in Sport

## Tentative Class Schedule

This class schedule is very ambitious. Modifications and/or eliminations of certain content might be required given our limited time together. Any necessary modifications to the course content will be communicated to you in the regular class period.

DATE	WEEK	CHAPTER #	TOPICS
Jan. 11-17	1	1	Stylized Facts, Sports History, League Functions.
Jan. 18-24	2	2, 3	Toolbox: Demand and Supply, Market Structures
Jan. 25-31	3	4	Toolbox: Consumer Surplus, Producer Surplus, Monopoly Applications
Feb. 1-7	4	5	Analytics: Econometric Methods
Feb. 8-14	5	6	Analytics: Performance Measures
Feb. 15-21	-	-	<b>READING WEEK</b>
<b>FEB 22</b>	-	-	<b>MIDTERM</b>
Feb. 22-28	6	7, 7 Appendix	Analytics: Profit Maximization
<b>FEB 26</b>	-	-	<b>ASSIGNMENT #1 DUE</b>
Mar. 1-7	7	8	Analytics: Game Theory in Sports
Mar. 8-14	8	9	Business: The Business of Sport
Mar. 15-16	-	-	<b>ADDITIONAL PAUSE DAYS</b>
Mar. 17-21	9	10	Business: Competitive Balance
Mar. 22-28	10	11	Labour: Labour-Leisure Choice, Training
Mar. 29 – Apr. 4	11	12	Labour: Unions, Collective Bargaining
Apr. 5-11	12	13	Public Expenditure: Public goods, Externalities, Public funding for sports
<b>APR. 9</b>	-	-	<b>ASSIGNMENT #2 DUE</b>

## Other Policies

### **Electronic Device Policy**

- **THE CLASSROOM IS A HANDHELD-DEVICE-FREE ZONE.**
- Turn off all handheld devices and put them away for the duration of the lecture.
- Laptop computers may only be used to view lecture material.
- Photographic devices are not permitted in class due to copyright and privacy issues.
- Audio or video recording devices are not permitted in class due to copyright and privacy issues.

### **Policy on remarking of Tests**

If you feel that your test was not marked properly, you must advise the instructor within 5 business days of the date on which the test is handed back to the class. Any student that submits a test for remarking should understand that the entire test will be remarked and that their grade may improve, remain unchanged or perhaps even decrease as a result of the remarking process.

### **Virtual Attendance Policy**

Virtual class attendance is an integral part of your educational experience. While attendance is not an explicitly graded component of this course, it is an important factor in ensuring your complete understanding of the material presented. You are responsible for all material presented in the textbook and lecture slides whether you choose to read them in a timely manner or not.

### **Classroom Protocols**

- I do NOT lend my personal lecture notes to students for any reason.
- In order to maintain a learning environment in this classroom, I expect the highest level of courtesy and professional behavior from every student. In particular, be punctual and turn off all audible ringers on all devices during class.
- As a courtesy to the custodial staff, if you have coffee, water, etc., please dispose of your garbage when you leave the classroom.
- No private conversations in class will be tolerated.

### **Intellectual Property**

Students should be aware that this course contains the intellectual property of their instructor, TA, and/or the University of Waterloo. Intellectual property includes items such as:

- Lecture content, spoken and written (and any audio/video recording thereof);
- Lecture handouts, presentations, and other materials prepared for the course (e.g., PowerPoint slides);
- Questions or solution sets from various types of assessments (e.g., assignments, quizzes, tests, final exams); and

- Work protected by copyright (e.g., any work authored by the instructor or TA or used by the instructor or TA with permission of the copyright owner).

Course materials and the intellectual property contained therein, are used to enhance a student's educational experience. However, sharing this intellectual property without the intellectual property owner's permission is a violation of intellectual property rights. For this reason, it is necessary to ask the instructor, TA and/or the University of Waterloo for permission before uploading and sharing the intellectual property of others online (e.g., to an online repository).

Permission from an instructor, TA or the University is also necessary before sharing the intellectual property of others from completed courses with students taking the same/similar courses in subsequent terms/years. In many cases, instructors might be happy to allow distribution of certain materials. However, doing so without expressed permission is considered a violation of intellectual property rights.

Please alert the instructor if you become aware of intellectual property belonging to others (past or present) circulating, either through the student body or online. The intellectual property rights owner deserves to know (and may or may not have already given their consent).

#### **Institutional-required statements for undergraduate course outlines approved by Senate Undergraduate Council, April 14, 2009.**

##### **Economics Department Deferred Final Exam Policy**

Deferred Final Exam Policy found at <https://uwaterloo.ca/economics/undergraduate/resources-and-policies/deferred-final-exam-policy>

##### **Cross-listed course**

Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric.

##### **Academic Integrity**

**Academic Integrity:** In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility. See the [UWaterloo Academic Integrity](#) webpage and the [Arts Academic Integrity](#) webpage for more information.

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71 - Student Discipline](#). For typical penalties check [Guidelines for the Assessment of Penalties](#).

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. [Read Policy 70 - Student Petitions and Grievances](#), Section 4. When in doubt, please be certain to contact the department's administrative assistant who will provide further assistance.

**Appeals:** A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 - Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72 - Student Appeals](#).

### **Accommodation for Students with Disabilities**

**Note for students with disabilities:** [The AccessAbility Services office](#), located on the first floor of the Needles Hall extension (1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

### **Mental Health Support**

All of us need a support system. The faculty and staff in Arts encourage students to seek out mental health supports if they are needed.

#### **On Campus**

- Counselling Services: [counselling.services@uwaterloo.ca](mailto:counselling.services@uwaterloo.ca) / 519-888-4567 x. 32655
- **MATES:** one-to-one peer support program offered by Federation of Students (FEDS) and Counselling Services
- Health Services Emergency service: located across the creek from Student Life Centre

#### **Off campus, 24/7**

- [Good2Talk](#): Free confidential help line for post-secondary students. Phone: 1-866-925-5454
- Grand River Hospital: Emergency care for mental health crisis. Phone: 519-749-433 ext. 6880
- [Here 24/7](#): Mental Health and Crisis Service Team. Phone: 1-844-437-3247
- [OK2BME](#): set of support services for lesbian, gay, bisexual, transgender or questioning teens in Waterloo. Phone: 519-884-0000 extension 213

Full details can be found online at the Faculty of ARTS [website](#)

Download [UWaterloo and regional mental health resources \(PDF\)](#)

Download the [WatSafe](#) app to your phone to quickly access mental health support information

### **Territorial Acknowledgement**

We acknowledge that we are living and working on the traditional territory of the Attawandaron (also known as Neutral), Anishinaabe and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, the land promised to the Six Nations that includes six miles on each side of the Grand River.