Dispute Resolution
SYLLABUS

Capsule summary

We might argue over it, but let’s do it rationally.

Information at a glance

Course: Dispute Resolution
Web Site: <http://virgo.unive.it/licalzi/dr.html>
Professor: Marco LiCalzi (email: licalzi@unive.it)
Class: TBA
Time: MW 13:30–16:00 [I use local conventions for time.]
Office Hours: W 10:00–12:00 (Office: Room 205, Building C2, San Giobbe)
Tutor: Matteo Aggio (email: matteo.aggio@unive.it)

Course description

The purpose of this course is to provide students with a sound understanding of the main theories underlying the search for equity or fairness in a dispute. This knowledge is used to set up and solve typical negotiation or bargaining problems arising in business and economics. The necessary skills are developed by working out common applications and examples in typical setups. The examples range from the Bible to Wall Street, and are often inspired by the news.

The target audience includes any undergraduate student with a serious interest about negotiation, bargaining, fair division, and equity. The course has a theoretical bent, and tries to balance case studies and formal arguments.

Contents

Setting priorities
Apportioning seats
Settling claims
Sharing costs
Bargaining
Dividing fairly
Envy and efficiency
Prerequisites

You are expected to have completed one year of college mathematics, or otherwise being able to differentiate elementary functions, compute the expected value of a random variable, and solve small systems of linear equations. Some previous exposure to worksheets and basic game-theoretic reasoning is helpful. (If you know what Excel and a Prisoners’ Dilemma are, you should be fine.)

Course and class organization

You are expected to read the assigned material before coming to class and have a basic appreciation of its contents. (It is not necessary to understand everything before class, but you should have a rough idea of what is going on.) Please bring to class paper and pencil, a pocket calculator, and a device with internet access. Attendance is expected, and any absence should be reported at the CFHSS office (cafoscari-harvard@unive.it).

The course lasts five weeks, usually with two meetings per week. (There are exceptions, so please check the schedule below.) Each meeting is divided into two sessions, with a 15’ break in between.

Teaching notes are distributed in advance of each class. (You are advised to bring a paper copy with you for note-taking.) There will be in-class quizzes, whose successful completion requires internet access. (Please make sure you have the appropriate technology with you in class.)

The last two meetings are reserved for students’ presentations: each student is given 15 minutes to deliver a short presentation that highlights how the insights from the course apply to a practical problem of his or her choice.

Grading

The final grade is based on five items: final exam (30%), quizzes (25%), class presentation (15%+5%), research report (20%), and class participation (5%). Master’s students and all other students at graduate level will be given extra work for grading purposes.

Final exam. This is a written exam taken in class, which requires a combination of short formal answers and long argumentative ones. It lasts 2h15’ and consists of two parts. The first half consists of no more than eight open-ended questions on material covered in the textbook or in my teaching notes. The second half of the exam asks to write two (very short) essays inspired by the material covered in Young. The exam is closed-book, but you are allowed to bring in a pocket calculator and two sides of an A4 sheet of your own notes.

Quizzes. Quizzes are closed questions, administered in most of the first eight classes. They test you on the material read at home in preparation for the class, and on the material covered in the previous class. You need internet access and a browser to answer the quizzes.

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1 You are expected to read Chapter 1 of Young (1994) before the first class. It is available on the class website.
(If you plan using a mobile phone, it is recommended to download the free Kahoot app beforehand. This is available both on iOS and Android.)

Presentation. This is a 15' slide-based presentation delivered by you. The presentation is graded for effectiveness, so you need to plan carefully. Make sure that you present the problem, outline the main issues, and describe possible solutions. After each batch of four presentations, your peers will fill an anonymous comparative evaluation form via internet. The outcome of these peer-based evaluations contributes 5% to your final grading, so make sure to target your presentations towards your fellow students. Kudos for the brave students who volunteer to talk in the first available slots.

The topic for your presentation is chosen by you after consultation with me. To get you started, I am going to post on the class website a collection of articles from The Economist that discuss disputes of all sorts. The articles are ten-year old, giving you a chance to discuss what progress was made and how things turned out. However, your choice should not be limited to them and you should feel free to explore different topics or different situations. It is not necessary to deal with worldwide disputes: one of the most effective presentations I have seen concerns how the owners of a condominium should split a bill for common expenses.

Report. The research report is a written paper on a topic of your interest chosen in consultation with me. Its length should be no more than 24,000 characters, excluding white spaces, tables, and figures.) It is not infrequent to rely on material drawn from the additional readings, but I can point you elsewhere. If your report deals with the same topic as your presentation, it cannot be the mere transcript of your presentation and should bring an added value. The report is due by August 2nd, in class.

Reading list

Required reading is from Young (1994). Additional reading may be assigned, possibly also individually. All required (as well as most of the additional) reading is made available via internet through password-protected access. (The password will be handed out during the first class.) You are expected to abide by the Italian laws on fair usage of digital copies.

Required

H.P. Young (1994), Equity: In theory and practice, Princeton University Press. (All chapters except chap. 6 and the mathematical appendix.)


See http://www-rohan.sdsu.edu/~vadim/fair-div.pdf for a nice example of an effective presentation.
Recommended

G.O. Faure (2003), *How people negotiate: Resolving disputes in different cultures*, Springer. (This is a wonderful guide to the intricacies of real-life dispute resolution, much richer than the “rational approach” discussed in this class.)

K. Binmore (2007), *Playing for real: A text on game theory*, Oxford University Press. (Chapters 16–19 offer a more formal presentation for most topics.)

Additional readings

Chapters from the following books may be useful.

M.H. Bazerman (ed.) (2005), *Negotiation, decision making and conflict management*, 3 volumes, Elgar.


H. Raiffa et al. (eds.) (2002), *Negotiation analysis: The science and art of collaborative decision making*, Harvard University Press.


## Schedule and class organization

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<tr>
<th>Day</th>
<th>Time</th>
<th>Content</th>
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<tbody>
<tr>
<td>1</td>
<td>26/6 13:30-16:00</td>
<td>Overview of course (read Y1 in advance)</td>
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<td>Apportionment</td>
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<td>2</td>
<td>28/6 13:30-16:00</td>
<td>Apportionment (read Y3 in advance)</td>
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<td>Priority</td>
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<td>3</td>
<td>10/7 13:30-17:15</td>
<td>Priority (read Y2 in advance)</td>
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<td>Bargaining</td>
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<td>4</td>
<td>12/7 13:30-16:00</td>
<td>Bargaining (read Y7 in advance)</td>
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<td>Proportionality</td>
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<td>5</td>
<td>17/7 13:30-16:00</td>
<td>Proportionality (read Y4) in advance</td>
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<td>Cost sharing</td>
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<td>6</td>
<td>19/7 13:30-16:00</td>
<td>Cost sharing (read Y5 in advance)</td>
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<td>Fair division</td>
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<td>7</td>
<td>21/7 9:00-11:30</td>
<td>Fair division (read Y8 in advance)</td>
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<td>Equity and envy</td>
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<td>8</td>
<td>24/7 13:30-17:15</td>
<td>Equity and efficiency (read Y9 in advance)</td>
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<td>Recap of course and exam simulation</td>
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<td>9</td>
<td>26/7 13:30-16:00</td>
<td>Final exam</td>
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<td>10</td>
<td>31/7 13:30-16:00</td>
<td>Students’ presentations</td>
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<td>11</td>
<td>2/8 13:30-16:00</td>
<td>Students’ presentations</td>
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