

Introduction to Game Theory to Law and Philosophy Students
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Problem Set 1

1. A student needs one additional course to complete his BA. He is searching the list of courses, organized by course number, and takes the first course on the list which is still open and for which the average grade last year was above 70. Is he behaving rationally in an economic sense?

2. Recall the questionnaire of the type we discussed in class (for seeing it again, visit <http://gametheory.tau.ac.il/exp11/> and enter the group "test"). An individual responded to the questionnaire so that:

For every triple of alternatives x , y and z ,

(i) Whenever he expressed a preference of x over y and of y over z , he also expressed a preference of x over z ; and

(ii) Whenever he expressed indifference between x and y and between y and z , he also expressed indifference between x and z .

Show that it is impossible that he expressed a preference of x over y and indifference between y and z , and nevertheless he did not express a preference of x over z .

3. Listen to <http://asa.aip.org/sound/cd/demo27a.au>. Do you find any connection between the phenomenon you identify in the music (called "The Shepard Scale") and the possibility that preferences will exhibit intransitivity?