**Lesson Plan: Project AXLRD**

This is a suggested lesson plan for introducing the theory of repeated Prisoners’ Dilemmas, and the Axelrod tournament learning activity. It is timed about for a 60-minute class, with several short discussions, plus a 30-50 minute “hand-on” time.

**Learning Objectives**

(slide 2) After completing this lesson, students will be able to:

* Describe how we can use repeated games to describe repeated interactions between individuals in strategic situations
* Explain how a Prisoner's Dilemma describes the tension between cooperation and self-interest
* Analyse this model and use theory to predict individual behaviour in finitely repeated Prisoner's Dilemma games
* Understand how this prediction relates to the beliefs individuals have about others playing the game and what we have found in experiments
* Design their own strategies to take part in similar experiments

**Pre-class and Prep**

* Before the class begins, students should be seated in groups which they will use to complete the worksheet and discuss with one another (recommended size 3-5)
* You should ask at least one of the students in each group to bring a laptop, or have access to a computer (e.g. in a lab)
* Ensure you have photocopies of the worksheets to provide to students

**Bridge-in and Introduction (15 minutes)**

* Slides 3-11
* *Learning activity*: Discussion 1 (slide 8)

**Topic 1: Repeated Prisoner’s Dilemmas (15 minutes)**

* Slides 13-21
* *Learning activity*: Think-share-pair (slide 18)

**Topic 2: Strategies and Beliefs (15 minutes)**

* Slides 22-31
* *Learning activity*: Discussion 2 (slide 24)

**Topic 3: Project AXLRD (15 minutes)**

* Slides 32-41
* *Learning activity*: Discussion 3 (slide 37)

**Summary and Closure**

* Wrap-up and worksheet hand-out
* Students should start working on the worksheet for the remaining time
* Instructor should walk around and introduce the tool or demonstrate using their PC and a project