



Center for Curriculum Redesign

Professional Development in Game Theory

Module Content

Unit 1: Understanding Games

- 1.1 - Playing to Win
- 1.2 - Prisoner's Dilemma
- 1.3 - Mixed Strategies
- 1.4 - Everyone Can Win

Project Connection 1: Harvesting Fish

Unit 2: Using Games to Understand Conflict

- 2.1 - Tragedy of the Commons & Stable States
- 2.2 - Fairness & Incomplete Information
- 2.3 - Sequential Games

Project Connection 2: Water Scarcity

Module Time: 30 hours*

Module Project: Traffic Congestion & Commuting

Core Concepts in this Module

- Abstraction
- Play the Right Game, Right
- Simulation Allows for Experimentation
- Modeling

Competencies in this Module

- Critical Thinking
- Ethics
- Collaboration

*Total module time of 20 hours includes both independent learning/asynchronous (~85%) and synchronous (~15%)