

Administration

There are three more books on reserve:

- ▶ Strategies and Games: Theory and Practice (Dutta)
(also available online)
- ▶ An Introduction to Game Theory (Osborne)
(contains evolutionarily strategic strategies)
- ▶ Thinking Strategically (Dixit and Nalebuff)

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Find a real world application of the quantitative reasoning that we've covered in class

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By Friday, November 8. turn in:

- ▶ topic
- ▶ one paragraph summary
- ▶ at least one reference

Evolutionarily Stable Strategies

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- ▶ This creates a competing 'strategy', compared to animals without the mutation
 - ▶ A strategy is a genetic disposition
 - ▶ The payoff corresponds to the likelihood of offspring

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 - ▶ Cooperators will not thrive
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Definition

In a 2-player symmetric game, a strategy s is **evolutionarily stable** if for sufficiently small numbers $\epsilon > 0$, and any other strategy s^* ,

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This is saying that the utility of s in a mixed population $(1 - \epsilon, \epsilon)$ is better than the utility of s^* in the mixed population

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