

STVXXX – Introduction to Game-theoretic Models of War

Course description

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Schedule, syllabus and examination date

Choose semester

- [Spring 2021](#)

Course content

Game theory may be defined as the use of formal models in the study of strategic interaction. This course offers an introduction to game theory and its potential applications to the study of war. Game theory suggests at least three main sources of war. First, war may result from asymmetric information. Because countries may have incentives to misrepresent their military strength, they may be unable to settle a dispute peacefully. Second, commitment problems might result in war. If two countries want to settle a dispute peacefully but suspects that the other side is unlikely to abide with the terms of that settlement, they may resort to warfare. Finally, war could result when the main source of the dispute involves an indivisible good, so that a compromise is difficult or even impossible.

The course will place particular emphasis on explaining puzzles related to war in general and World War I in particular. Specifically, the course provides a primer in core issues concerning war, including (but not limited to):

- Information problems
- Commitment problems
- Indivisibilities
- Arms races
- Coalition building
- War termination
- Differences between international and civil wars

Learning outcome

The course aims at teaching the students to apply simple game-theoretic models in the study of war.

Knowledge

Having completed the course, you

- Are familiar with basic game-theoretic terminology
- Can describe the logics of game-theoretic models
- Can apply game-theory logic to analyze questions related to war

Skills

Having completed the course, you can:

- Identify puzzles and use game theory to resolve them
- Extract the underlying logic of game-theoretic models
- Read and understand scholarly work that uses game theory

Competences

Having completed the course, you have:

- Increased your general analytical competence
- Enhanced your ability to use game-theoretic logic in your own work
- Acquired the ability to formulate and analyze game-theoretic models

Prerequisites

Recommended previous knowledge

Advanced student in a Bachelor program in political science or equivalent and have taken an introduction to international politics course, such as STV1200.

Overlapping courses

Teaching

The teaching will consist of a total of 10 lectures (each of 2 hours duration)

Examination

4 hour exam

Digital examination

The written examination is conducted in the digital examination system Inspera. You will need to familiarize yourself with the digital examination arrangements in Inspera.

[Read more about written examinations using Inspera.](#)

Language of examination

You may write your examination paper in Norwegian, Swedish, Danish or English.

Grading scale

Grades are awarded on a scale from A to F, where A is the best grade and F is a fail. Read more about [the grading system](#).

Explanations and appeals

- [Explanation of grades and appeals](#)

Resit an examination

Students who [have a valid reason for absence from the regular examination](#) are offered a postponed examination at the beginning of the next semester.

Re-scheduled examinations are not offered to students who withdraw during, or did not pass the original examination.

The course is only offered this semester.

Special examination arrangements

Application form, deadline and requirements for [special examination arrangements](#).