The course aims to provide an overview of argumentation as it is studied in Artificial Intelligence, led by applications in the field of law. The course goals are:

- Acquire knowledge of the study of argumentation in Artificial Intelligence
- Acquire knowledge of the applications in the field of law
- Develop critical reflection about the subject matter and the state-of-the-art in the field

**Lecture Ia: Introduction**

Topics:

- Argumentation in Artificial Intelligence
- Historical Background

Goals:

- Get an overview of the course and its subject matter
- Acquire insight about the historical background

Literature:


Background:


For more information on Toulmin & argumentation in Artificial Intelligence, see:


Lecture Ib: Abstract Argumentation and Argument Structure

Topics:
- Abstract Argumentation
- Argument Structure

Goals:
- Acquire knowledge of abstract argumentation and its semantics
- Acquire insight into the relation between argument structure and abstract argumentation

Literature:
Van Eemeren et al. (in preparation). Sections 11.4-11.5.

Background:

Lecture IIA: Argument Schemes and Argumentation Dialogues

Topics:
- Argument Schemes
- Argumentation Dialogues

Goals:
- Understand the nature and role of argument schemes
- Understand the nature and role of argumentation dialogues

Literature:
Van Eemeren et al. (in preparation). Sections 11.6, 11.7.

Background:
Lecture IIb: Argumentation with Rules and with Cases

Topics:
- Reasoning with Rules
- Case-based Reasoning

Goals:
- Acquire knowledge about reasoning with rules
- Acquire knowledge about case-based reasoning
- Acquire insight into the relations between reasoning with rules and case-based reasoning

Literature:
- Van Eemeren et al. (in preparation). Sections 11.8, 11.9.

Background:

For more information on rules and principles, see:

For more information on case-based reasoning with an entangled factor hierarchy, see:
For more information on the relation between rule-based and case-based reasoning, see:

Lecture IIIa: Reasoning with Evidence

Topics:
Reasoning with Evidence

Goals:
- Acquire knowledge about three styles of reasoning with evidence: argumentative, narrative and probabilistic

Literature:
Van Eemeren et al. (in preparation). Sections 11.12

Background:

For more information on argument schemes for anchored narratives theory:
Lecture IIIb: Argument Strength and Probabilities

Topics:
Argument Strength and Probabilities

Goals:
- Reflect on argument strength and probabilities
- Reflect on the future of argumentation in Artificial Intelligence and Law

Literature:
Van Eemeren et al. (in preparation). Sections 11.12

Background: