

## Overview

"Artificial intelligence and academic integrity in political science education"

Large language models

Pedagogical approaches: mitigate, inform, adopt

Artificial intelligence literacy

### Broad types of artificial intelligence

Artificial narrow intelligence (ANI) → task specific

Artificial general intelligence (AGI)  $\rightarrow$  human level Artificial super intelligence (ASI)  $\rightarrow$  super-human level

Actually existing 'artificial intelligence' is a marketing term for a wide range of task-specific algorithmic systems

# Machine learning

Advances in ANI over the past 10 years have been driven by:

- 1. Improved machine learning algorithms
- 2. Big data
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## Large language models

LLMs are a type of 'natural language processing' and most primarily use

## Pedagogical approaches to LLMs

Mitigate

Regulate large language model use and change assessment design

Inform

Teach students what large language models are, what they can do, and when their use is appropriate

Adopt

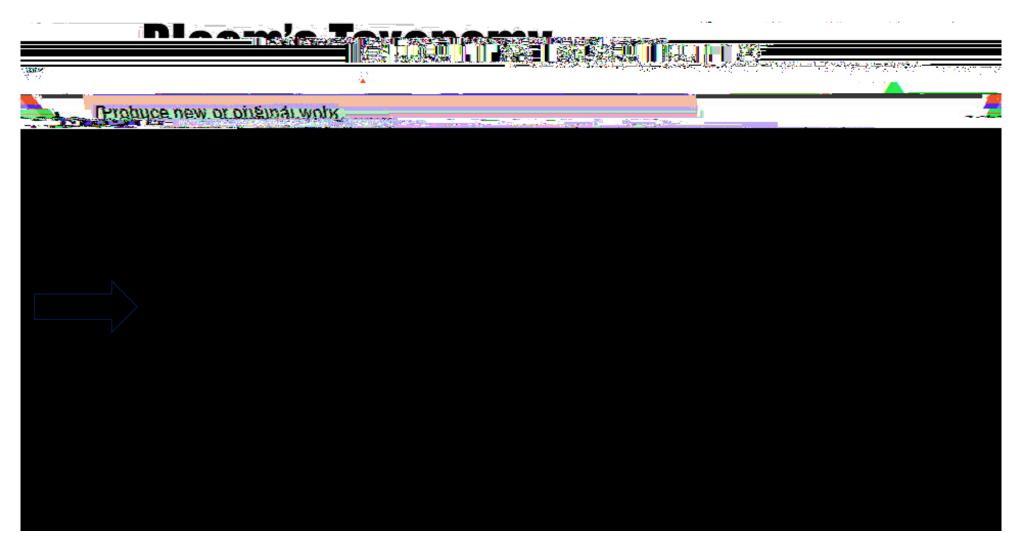
Incorporate large language models into the curriculum

## Mitigate

Limit the use of ChatGPT and other large language models to purposes approved by the course instructor

Treat unauthorized use of LLMs as a form of 'contract cheating'

Emphasize analytical, evaluative, and creative tasks in all assessments, following Bloom's taxonomy of cognitive processes in learning



"Bloom's Taxonomy" by Vanderbilt University Center for Teaching, licensed under <u>CC BY 2.0</u>.

#### Adopt

Encourage the use of automation for tasks that are not integral to learning and for which 'cognitive offloading' (Dawson 2020) is appropriate

LLMs may often be a useful starting tool for other tasks, but it's more like talking with a knowledgeable but overconfident peer than an expert

LLMs should only be used for research insofar as they follow the inferential and evidentiary standards of your discipline

## Artificial intelligence literacy

Explain the character and limitations of algorithmic systems

Explain the importance of how algorithmic systems are perceived and other social implications

Explain how and when algorithmic systems should and shouldn't be used