

NLP



Course overview, grading
and rules

```
mirror_mod = modifier_ob.  
#set mirror object to mirror  
mirror_mod.mirror_object =  
operation == "MIRROR_X":  
mirror_mod.use_x = True  
mirror_mod.use_y = False  
mirror_mod.use_z = False  
operation == "MIRROR_Y":  
mirror_mod.use_x = False  
mirror_mod.use_y = True  
mirror_mod.use_z = False  
operation == "MIRROR_Z":  
mirror_mod.use_x = False  
mirror_mod.use_y = False  
mirror_mod.use_z = True
```

```
#selection at the end -add  
mirror_ob.select= 1  
modifier_ob.select=1  
context.scene.objects.active  
("Selected" + str(modifier_ob.  
mirror_ob.select = 0  
= bpy.context.selected_object  
data.objects[one.name].select  
print("please select exactly
```

--- OPERATOR CLASSES ---

```
types.Operator):  
X mirror to the selected  
object.mirror_mirror_x"  
mirror X"
```

```
context):  
context.active_object is not
```

COURSE OVERVIEW

- **Course Objective:**
 - The NLP course introduces students to foundational techniques in natural language processing (NLP), progressing from basic text processing to advanced language models. The course serves as an introduction to NLP concepts and applications, preparing students for practical and theoretical work in the field.
- 1. **Text Processing Basics:**
 - Students will learn how to process text data using Python constructs such as list comprehensions, regular expressions, and SpaCy's text processing methods.
- 2. **Vectorization Techniques:**
 - The course covers key methods for transforming text into numerical representations, focusing on both classical and contemporary approaches to vectorization.

COURSE OVERVIEW

3. **Modern Text Processing:**

- Students will be introduced to transformer-based large language models (LLMs), understanding their core principles and applications in NLP.

4. **Deeper Methodological Understanding:**

- The course includes a focus on understanding the underlying mechanics of NLP methods, including the role of matrices in text processing techniques.

5. **Independent Application Development:**

- As a culminating project, students will independently explore a locally deployable large language model of their choice. They will develop an application that integrates the selected language model with other NLP techniques learned during the course.

Guidelines for AI Usage:

- Students may use AI as a learning tool to assist with understanding course content. However, directly using AI to complete assignments is strictly prohibited. Violations will result in course failure and formal proceedings at SAMK.

COURSE OVERVIEW

Final Exam:

- Students will be offered **three dates** to complete the final exam. These dates correspond to the last three lecture sessions of the course and will take place at the usual course time and location. The tentative exam dates are **April 15th, April 22st, and April 29th.**
- Students have the flexibility to use these three exam dates as they wish. They may choose to take the exam on one date or participate in multiple exams if they wish to attempt to improve their results. However, the **latest exam attempt will always be considered final, regardless of whether it is the best score among attempts.**
- **No additional exam sessions will be organized** outside these official dates. Therefore, students must ensure their availability on one of the provided dates.
- This course requires commitment, discipline, and adherence to the outlined guidelines to ensure academic integrity and learning outcomes.

GRADING

- Grade 1 : 50% of tasks done in time, exam and final task passed
- Grade 2 : 50% of tasks done in time, final task passed, exam passed with grade 2
- Grade 3 : 70% of tasks done in time, final task passed, exam passed with grade 3
- Grade 4 : 80% of tasks done in time, final task passed, exam passed with grade 4
- Grade 5 : 90% of tasks done in time, final task passed, exam passed with grade 5

COURSE RULES

- **All exercises, questionnaires, tasks and exam** is done **individually**. There are no group-assignments in this course.
- **Copying and/or cheating** in any way is strictly forbidden and will result in expulsion from the course and **will always lead to official procedures in SAMK**.
- The deadlines for exercises and questionnaires are fixed. You can get 5/5 even if you are for example sick for a week or cannot finalise some of the tasks in time for any other reason. It has been decided with teachers that **no exceptions are made with deadlines in this course**.