# Overview of course assessment

The **Introduction to Natural Language Processing (F21NL)** course aims to:

- lay the foundations of core concepts in Linguistics;
- present the most common Natural Language Processing (NLP) problems together with appropriate Machine Learning solutions;
- familiarise students with NLP applications in currently active research areas using Machine Learning techniques;
- enable students to build simple NLP applications using commonly used libraries;
- raise critical awareness of the appropriateness of NLP techniques and the relationships between them.

Assessment of this course has been designed to evaluate your understanding of the key course learning outcomes (LOs) which we report below:

LO1: Understand core concepts in Linguistics;

LO2: Understand the linguistic motivation behind common Natural Language Processing (NLP) problems;

LO3: Practice the mathematics underpinning methodologies of machine learning models for NLP;

LO4: Differentiate between some popular machine learning modelling architectures to NLP;

LO5: Assess the appropriateness and performance of different machine learning models to solve common NLP problems;

LO6: Choose appropriate machine learning modelling libraries to conduct experiments for training and evaluating NLP systems;

LO7: Conduct research independently to tackle practical problems.

Assessment consists of the following elements:

| **Assessment** | **Deadlines and marks** | **Description** | **Relevant learning outcomes** |
|---|---|---|---|
| **Coursework 1**: Word Embeddings using the GENSIM library | 15%; released on 24/09 - Week 3, deadline on 15/10 - Week 6 | You will train and re-use some popular word embedding algorithms and compare them on a *classic* benchmark word similarity dataset. | LO3, LO4, LO5, LO6, LO7 |
| **Coursework 2**: Language Modelling and Machine Translation | (25%; released on 22/10 - Week 7, deadline on 26/11 - Week 12) | You will use the PyTorch-lightning framework to train and re-use some industry-standard Neural Network architectures for Machine Translation. | LO3, LO4, LO5, LO6, LO7 |
| **Final exam on Canvas** | 60% | This is an **on-campus invigilated closed-book online exam on Canvas** composed of a combination of multiple choice and short essay questions. The exam will cover all the topics taught throughout the course, but will not require any actual coding on the computer. Code snippets might be included in the questions. | LO1, LO2, LO3, LO4, LO5 |

We will use **Google Colab (https://colab.research.google.com/)** for each coursework; this will enable you to have access to computational resources in the cloud to run your code. Each coursework will consist of a Python notebook with boilerplate code that you will use to build your solutions. All the NLP libraries required for these coursework assessments will be taught and described during the lab sessions. Therefore, for this course is essential to attend the labs sessions.

**NB**: Before you submit each piece of coursework you will be required to complete a **Declaration of Authorship (https://ebsglobal.instructure.com/courses/28967/quizzes/60155)** form.