

## Assignment Brief Form

### Course information from DRPS

<b>Course acronym</b>	MLP
<b>Course code</b>	INFR11132
<b>Credits</b>	20
<b>Course Organiser(s)</b>	Pavlos Andreadis
<b>Learning Outcomes</b> Paste in from DRPS	<p>On completion of this course, the student will be able to:</p> <ol style="list-style-type: none"> <li>1. obtain experience in the design, implementation, training, and evaluation of machine learning systems.</li> <li>2. read technical papers, and explain their relevance to the chosen approach</li> <li>3. design and carry out appropriate experiments, and explain the methodology involved</li> <li>4. evaluate the resultant system</li> <li>5. write a scholarly report, suitably structured and with supporting evidence</li> </ol>

### Mapping of Learning Outcomes onto Assessment

Please indicate which Learning Outcomes are assessed by which assessment components by entering a "+" in the cells of the table below.

	LO1	LO2	LO3	LO4	LO5
CW1	+	+	+	+	+
CW2	+	+	+	+	+
CW3	+	+	+	+	+
CW4	+	+	+	+	+

## Brief for each coursework

### CW1

<b>Assignment name</b>	Coursework 1  This name should correspond to the Coursework Name in PIP
<b>Task overview</b>	This formative coursework is the interim report for Coursework 2 and is intended as a first milestone and opportunity to reflect on your work and request support where there might be difficulties.
<b>Assessment criteria</b>	We will be looking for the ability to conduct experiments (LO1, LO3), explain the methodology appropriately (LO3, LO5), interpret and discuss the results (LO1, LO4, LO5), relate solutions to existing ones in the literature (LO2, LO5).
<b>Submission instructions</b>	We indicate how long an answer to each question should be in the coursework specification. We do not reduce the mark for excess material.
<b>Guidance on size of submission</b>	Submission is made in the form of a compiled .pdf document, along with the necessary LaTeX and supplementary files to compile it, as well as the code used for the experiments and visualisations. The submission will be submitted in Learn.
<b>Penalties for overlong submissions</b>	N/A
<b>Feedback procedure</b>	Students are provided with a detailed rubric (in the form of an excel sheet), as will be used by the markers for Coursework 2 (the rubric forms part of/supports the marking). There will be opportunity to discuss any difficulties with the instructors (Piazza and Office hours). There will not be individual feedback provided for this formative assessment. Feedback across the cohort, and general, actionable observations will be communicated to all students.
<b>Support arrangements</b>	We will use Piazza to regularly answer student questions and expect to answer questions by the end of each day. Weekly office hours provided.
<b>Marking and moderation procedure</b>	Coursework 1 is not marked.



## CW2

<b>Assignment name</b>  This name should correspond to the Coursework Name in PIP	Coursework 2
<b>Task overview</b>	The aim of this coursework is the identification and discussion of a fundamental problem in machine learning. Following a preliminary discussion, you will further investigate this problem in wider and deeper neural networks. The second part of the coursework involves implementing different methods to combat the problem identified and comparing these methods empirically and theoretically. Finally, you will briefly discuss some work related to the methods examined.
<b>Assessment criteria</b>	We will be looking for the ability to conduct experiments (LO1, LO3), explain the methodology appropriately (LO3, LO5), interpret and discuss the results (LO1, LO4, LO5), relate solutions to existing ones in the literature (LO2, LO5).
<b>Submission instructions</b>	We indicate how long an answer to each question should be in the coursework specification. We do not reduce the mark for excess material.
<b>Guidance on size of submission</b>	Submission is made in the form of a compiled .pdf document, along with the necessary LaTeX and supplementary files to compile it, as well as the code used for the experiments and visualisations. The submission will be submitted in Learn.
<b>Penalties for overlong submissions</b>	None. Each question has an indicative size specified for its answer. Conciseness is rewarded.
<b>Feedback procedure</b>	Students are provided with a detailed rubric (in the form of an excel sheet), as used by the markers, and their corresponding list of points scored for each question (they will need to cross-reference their points against the provided rubric). Together with the points, select written feedback is included to highlight points not directly addressed by the rubric. Feedback uploaded on Learn.



<b>Support arrangements</b>	We will use Piazza to regularly answer student questions and expect to answer questions by the end of each day. Weekly office hours provided.
<b>Marking and moderation procedure</b>	Each coursework is assessed by a marker using a well-defined rubric (the rubric forms part of/supports the marking). Marking is not anonymous, in that the UUN is required to be able to upload the feedback. Lecturers moderate throughout process (marking is synchronous).

### CW3

<b>Assignment name</b>  This name should correspond to the Coursework Name in PIP	Coursework 3
<b>Task overview</b>	This formative coursework is the interim report for the final group project and is a milestone for your progress on the research and work so far, to be evaluated by your assigned tutor-supervisor. This interim report should start building on the final project by including a Motivation and introduction to the project, Research question and project objectives, Data set(s) and task(s), and Methodology, as well as some Baseline experiments, Interim conclusions, and a Plan for the remainder of the project, including discussion of risks, and backup plans.
<b>Assessment criteria</b>	We will be looking for the ability to conduct experiments (LO1, LO3), explain the methodology appropriately (LO3, LO5), interpret and discuss the results (LO1, LO4, LO5), relate solutions to existing ones in the literature (LO2, LO5).
<b>Submission instructions</b>	None
<b>Guidance on size of submission</b>	Submission is made in the form of a compiled .pdf document, along with the necessary LaTeX and supplementary files to compile it, as well as the code used for the experiments and visualisations.
<b>Penalties for overlong submissions</b>	N/A



<b>Feedback procedure</b>	Students are provided with a written assessment of their work on each criterion, by their tutor-supervisor. Feedback uploaded on Learn. They will also discuss their work and feedback with their tutor-supervisor in their weekly supervisory meetings and asynchronously over their selected online communication channels, as appropriate.
<b>Support arrangements</b>	Weekly tutorials, office hours and piazza where questions are answered by the end of each day.
<b>Marking and moderation procedure</b>	Coursework 3 is not marked.

## CW4

<b>Assignment name</b>  This name should correspond to the Coursework Name in PIP	Coursework 4
<b>Task overview</b>	This coursework is the final report for the semester 2 group project. Submission is in the form of a research publication targeting a Machine Learning problem of your choice, is developed throughout Semester 2 under a provided tutor's supervision, and is expected to meet a minimum threshold of novelty and significance. The report will need to have an Abstract, Introduction, and Conclusions, and is expected to contain information on Task and data, Methodology, Experiments, and Related work (with flexibility on how sections are structured). Students may use any computing available, and the University's Teaching/MLP cluster is provided for this purpose. Feedback uploaded on Learn.
<b>Assessment criteria</b>	We will be looking for the ability to conduct experiments (LO1, LO3), explain the methodology appropriately (LO3, LO5), interpret and discuss the results (LO1, LO4, LO5), relate solutions to existing ones in the literature (LO2, LO5).
<b>Submission instructions</b>	The max length of the coursework is specified in the coursework spec. Exceeding material is allowed for completeness but ignored for marking.



<b>Guidance on size of submission</b>	Submission is made in the form of a compiled .pdf document, along with the necessary LaTeX and supplementary files to compile it, as well as the code used for the experiments and visualisations.
<b>Penalties for overlong submissions</b>	Submissions need to follow the provided formatting (as in the LaTeX templates provided) and be up to a maximum on 8 Pages, not including references and any appendices (appendices optional and not evaluated). No specified minimum size; this is handled implicitly via required sections and information.
<b>Feedback procedure</b>	Students are provided with two written assessments on each criterion, each by a different marker (one of which is their tutor- supervisor). Where there is discrepancy in the evaluation, moderator comments are also provided justifying the final mark.
<b>Support arrangements</b>	Weekly tutorials, office hours and piazza where questions are answered by the end of each day.
<b>Marking and moderation procedure</b>	Students are provided with two written assessments on each criterion, each by a different marker (one of which is their tutor- supervisor). Where there is discrepancy in the evaluation, moderator comments are also provided justifying the final mark.