Assessment Brief: Coursework 2022-23

Assessment Details

Course Title:	Intermediate Programming with Data (M)
Course Code:	NCHNUPH453M
Course Leader:	Dimitris Mylonas
Level:	Level 4
Sitting:	First Sitting
Assessment Title:	Data Science Project
Assessment Number:	AE3
Assessment Type:	Project
Restrictions on Time/Length:	2,000 words
Individual/Group:	Individual
Assessment Weighting:	20%
Issue Date:	9 January 2023
Hand in Deadline (Report):	17 April 2023
Planned Feedback Deadline:	28 calendar days after hand in deadline
Mode of Submission:	Online and in-class
Anonymous Marking:	Yes

Assessment Task

The goal of this project is to gain hands-on experience with finding, importing, analyzing, visualizing, and presenting a dataset of your choosing. The idea is to perform an end-to-end data science project on a realistic task, using the concepts and tools we have covered in DS2500 this term. You can discuss your project with us in laboratory or office hours. Your proposal and project report will be both submitted on Canvas.

Report

Write up a project final report into a self-contained Jupyter notebook form and submit it on Canvas by 09:00am on 17 April 2023. Document your data sources, general methodology, and discuss your project goals. Explain the significance of your project. The total word count should not exceed 2000 words. It should include (as markdown where applicable):

1. An introduction
2. Data sources and methods
3. Use-cases (if applicable)
4. Analysis and Results
5. Conclusions
6. References

You must use Python 3 to read, clean, analyse and visualise the data as necessary. Note that we will clear and restart your notebook, so please do this before submission to make sure there are no errors when we run your code.

Assessment Criteria

>70: There was evidence of the ability to perform all programming tasks correctly. The demonstration of the methods was excellent, coherent, well documented, and clearly explained.

60-69: There was evidence of ability to perform some programming tasks correctly. The demonstration of the methods is good, coherent, and reasonably detailed and explained.

50-59: There was evidence of ability to perform some programming tasks correctly, but the demonstration of the methods was limited, incoherent, not adequately documented and vaguely explained.

<49: Failure to solve the programming task in assignment. Methods were completely incorrect or absent.

Marking

The University uses two common assessment marking schemes – one for undergraduate and one for postgraduate – to mark all taught programmes leading to an award of the University.

More detailed information on the common assessment marking scheme and the criteria can be found in the Course Syllabus, available on the University's VLE.

Learning Outcomes

This assessment will enable students to demonstrate in full or in part the learning outcomes identified in the Course Descriptor.

On successful completion of this assessment, students should be able to:

Knowledge and Understanding

K1a Demonstrate familiarity and knowledge of current techniques, skills and tools necessary for effective computing practice.

K2a Demonstrate knowledge and understanding of applying design principles in the construction of software systems.

K3a Demonstrate knowledge and understanding of applying data science theory, methods, and tools to translate data into clear actionable insights.

Subject-Specific Skills

S1a Apply key concepts in Natural Language Processing to carry out a sentiment analysis and visualization of text.

S2a Implement a reusable framework for at least one machine learning technique and apply to a dataset.

S3a Demonstrate use of object-oriented methodologies, concepts, syntax, and coding practices including encapsulation and inheritance.

Transferable Skills

T1a Work independently, effectively, responsibly, and to deadlines.

T2a Identify, transform, evaluate and plot accordingly from the dataset.

T3a Produce clear and concise and well documented code

T4a Display a developing technical proficiency of written English skills that demonstrates an ability to communicate clearly and accurately when producing structured and coherent pieces of text.

Accessing Feedback

Students can expect to receive feedback on all summative coursework within 20 working days of the submission deadline. The 28 calendar day deadline does not apply to work submitted late. Feedback can be accessed through the Turnitin assessment link on the course page. Further instructions on submitting an assessment and accessing feedback can be found on the University's VLE.

Late Submissions

Students Are Reminded to:

Submit their assessment ahead of the published deadline. However, if assessments are submitted late without approved Extenuating Circumstances, there are penalties:

- Up to one day late of the published submission deadline = 5% points deducted from mark. For example, an assessment awarded 58% from the markers, the final mark recorded will be 53%. If the assessment is awarded 42% from the markers, the final mark recorded will be 37%.
- Two days late: any mark of 40% or higher will be capped at 40% for undergraduate students. Any mark of 50% or higher will be capped at 50% for postgraduate students. Any mark below 40% for undergraduate students and below 50% for postgraduate students, will stand.
- Students who do not submit their assessment within two days, and have no approved extenuating circumstances, are deemed to have failed that assessment element and the mark recorded will be 0%.

For further information, please refer to AQF7 Academic Regulations for Taught Awards in the Academic Handbook.

Extenuating Circumstances

The University's Extenuating Circumstances procedure is in place if there are genuine circumstances that may prevent a student submitting an assessment. If the EC application is successful, there will be no academic penalty for missing the published submission deadline. Students are reminded that EC covers only short-term issues (within 28 days leading to the submission deadline) and that if they

experience longer-term matters that impact on learning then they must contact Student Support and Development for advice.

For further information, please refer to the Extenuating Circumstances Policy in the Academic Handbook.

Academic Misconduct

Any submission must be a student's own work and, where facts or ideas have been used from other sources, these sources must be appropriately referenced. The Academic Misconduct Policy includes the definitions of all practices that will be deemed to constitute academic misconduct. Students should check this policy before submitting their work. Students suspected of committing Academic Misconduct will face action under the Policy. Where students are found to have committed an offence they will be subject to sanction, which may include failing an assessment, failing a course or being dismissed from the University depending upon the severity of the offence committed.

For further information, please refer to the Academic Misconduct Policy in the Academic Handbook.

Version History

Title: Assessment Brief Coursework (Mobility) Template **Approved by: The Quality Team**					
Version number	**Date approved**	**Date published**	**Owner**	**Location**	**Proposed next review date**
2.0	August 2022	August 2022	Registrar	VLE/ Faculty Resources Page	July 2023

1.1	December 2021	December 2021	Registrar	VLE	August 2022
1.0	September 2021	September 2021	Registrar	VLE	August 2022
Referenced documents	AQF7 Academic Regulations for Taught Awards; Extenuating Circumstances Policy; Academic Misconduct Policy; Course Syllabus				
External Reference Point(s)	UK Quality Code Theme: Assessment				