

L6 Assignment Brief: Comp3402 Nature of Computing 2020-21

Assignment 2 (Part 2)	Position Paper 2 (Part 2)	
Word Limit or equivalent (e.g. time)	No word limit. Indicative time 14 hours	
Weighting	1 / 6 of total module marks	
Learning Outcomes Assessed	3. Critically assess how an understanding of the natural world	
	helps us create digital worlds through programming.	
Submission date	14 th February 2022	
Feedback date	One week following submission	
Module Leader	Dr Colin Price <u>c.price@worc.ac.uk</u>	
Verified by	Dr Pete Moody	

If anything about this assignment is not clear to you, please contact your module leader.

What do I		
need to do to		
make a		
success of this		
assignment?		

You will write a position paper concerning the following statement

"Biological neurons can usefully inform the creation of computational artefacts"

You will draw on the worksheet material where you coded some simple neural circuits with various applications such as autonomous vehicles, legged robots and simple algorithms

Your paper will discuss the relationship between the neural circuit model and its implementation in code. Also, based on your investigations, you will evaluate the usefulness of neural circuits in solving computational problems.

You will **cite journal articles** and finally state your position concerning the above statement.



How should I present my work?

You may choose to write the paper in an 'essay' style without any headings, or you may structure your paper with headings, like a report. Please include your student number on each page, and also number the pages. Don't forget to consult the assessment matrix below.

One way of including journal articles is to write a short introduction paragraph where you outline what is to follow in your paper and cite the articles there.

The body of your paper is best organized as two sections as described above.

Then after your main body, add a single paragraph where you answer the question, so stating your 'position'. The communication quality of this paragraph will be assessed.

How can I obtain guidance on my assignment?

You can submit an assessment plan of your work in progress or a short piece of text (no longer than two sides of A4, incorporating images, diagrams, tables) to enable you to obtain guidance on the overall structure and direction of your assignment. You should submit this no later than one week before the submission deadline to enable you to review and address feedback provided to develop your work. This will be in a Blackbeard drop-box, alternatively you may choose to demonstrate your work in class.

You will receive an assignment briefing during the session w/c 17th January 2022.

How and when do I hand my assignment in?

Your work must be word-processed/typed and should clearly show your student number.

You should submit your work by the 3pm deadline on 14th February 2022. You should submit your work to the Blackboard drop-box which is available via MyDay. **You are required to keep a copy of work handed in**.

See the University's guide to uploading and submitting assessment items via Blackboard: https://help.blackboard.com/Learn/Student

If you have issues with Blackboard, Turnitin or PebblePad you will need to contact tel@worc.ac.uk



How will my assignment be marked?

Specific marking criteria for your assignment is provided in the Grading Matrix within this document.

You are strongly advised to check your completed work against the Grading Matrix to ensure have completed all areas required before you submit it.

Please consult the document on the module website which provides a glossary of terms used in this assignment and the grading matrix.

You should also ensure you adhere to the word limit / word count stated in your assessment brief document, details of which can be found in the University's Assessment Policy http://www.worc.ac.uk/aqu/documents/AssessmentPolicy.pdf



L6 Grading Matrix for Comp3402 Position Paper 2 (Part 2)

This matrix captures the assessment criteria for this part of the coursework.

Student Number/Name:	Academic Year and Semester:	Learning Outcomes:
	2021-22 AS	3. Critically assess how an understanding
		of the natural world helps us create digital
Module Code / Title:	Assignment No/Weighting:	worlds through programming.
Comp3402	Ass 2 (part 2). Weighting 1/6	
Nature of Computing		
	Assessment Title:	
	Position Paper 2 (Part 2)	

To best understand this matrix, start by reading the 'baseline' grade C. Higher grades build up progressively.

	Knowledge and Understanding		Autonomy in Learning	Communication
Grade	Critical Evaluation of Neural model and its relation to code	Critical Evaluation of investigations	Journal Article(s)	Well-written Paper
	30	40	10	20
Α	Critical evaluation of hexapod robot and Braitenberg vehicles	Critical evaluation of hexapod robot and Braitenberg vehicles	Journal articles expand or enhance the workshop material	Position is coherent and persuasive.
В	Critical evaluation of Braitenberg vehicles or algorithm structure or hexapod robot.	Critical evaluation of Braitenberg vehicles or implementation of an algorithm structure.	More than one relevant journal article presented	Position is coherent
С	Critical evaluation of relationship of model and code for simple neural circuits	Critical evaluation of functioning of simple neural circuits	One relevant journal article presented.	Statement of position in clear language.
D	Attempt at evaluation, but may contain errors	Attempt at evaluation, but may contain errors	Attempt at including extra material, though relevance may be questionable.	Statement of position is too short. Spelling and grammar may contain errors.
Fails	Little or no attempt at evaluation.	Little or no attempt at evaluation	Little or no attempt at including extra material	Little or no statement of position



Feedback on your assignment.

Please review this feedback and use it to develop your work in your next assignment in this and your other modules. If anything is unclear, please ask the marker.

Aspects done well and why:						
Aspects for improvement and why:						
Development for futu	re assign	ments:				
How successful completion of this assignment helps your employability and achievement of graduate						
attributes:						
attributes.						
	1					
Grade awarded:		Marker:	Moderator*:			
	l					

□ I do not want my work to be used anonymously to help future students

RESULTS ARE PROVISIONAL UNTIL AGREED BY THE BOARD OF EXAMINERS

^{*} This person is responsible for moderating a sample of student work for this module. Your work may, or may not, have been included in this sample.