UNIVERSITY OF CHESTER - Postgraduate Programmes Assignment Specification
Faculty of Science, Business & Enterprise
Department of Computer Science

Module No	Module Title	Assessment No	Weighting
CO7115	Research Methods	1	50%

Submission Date	Feedback due by
Monday 4th December 2023 at 17:30	08/01/24 17:30

Assignment Title

Critical Review

Learning Outcomes Assessed

- LO1: Select and investigate a topic of relevance to the program of study and propose new directions for research in that area.
- LO2: Demonstrate a critical understanding of the concept and demands of postgraduate research and be able to critically evaluate current research problems. Show a systematic understanding, and a critical awareness of current practice in CS research.
- LO4: Show a systematic understanding, and a critical awareness of current practice in CS research.

Submission Information

- This assessment is worth 50% of the overall module mark for CO7115.
- Submission for this assignment will be online, via Turnitin on the CO7115 Moodle page. You must submit your work as a single document in either Microsoft Word format (.docx) or as Adobe PDF format (.pdf), you must use the IEEE style Microsoft Word template document provided to you via the CO7115 Moodle page. Work which is submitted in an alternative format will usually be marked as zero.
- Please note, any work which is submitted elsewhere, other than via the turn-it-in link on the CO7115 Moodle page, will receive a mark of Zero and shall not be marked.
- The use of generative AI tools **IS NOT PERMITTED** and will be treated as a breach of the academic integrity policy

Extensions

Extensions should be requested through the online system available on the Registry services pages on Portal. Late work is penalised at the rate of 5 marks per day or part thereof.

Academic Conduct

The material you submit must be your own work. Please avoid colluding with peers on your work. The penalties for breaching the academic conduct policy are severe. The minimum penalty is usually zero for that piece of work. Further information is available at Portal > Support Departments > Academic Services > Academic Standards > Academic Conduct > Information for Students > Academic Conduct

Generative AI

The use of generative AI tools where not permitted will be treated as a breach of the academic integrity policy.

This assignment **does not** permit the use of any generative AI tools, including but not limited to ChatGPT, Bard, Copilot, Midjourney, and others.

Assignment Brief

An essential skill for postgraduate students and/or researchers is the ability to critically evaluate information. This skill is particularly important in understanding other researchers' work and the production of literature reviews, where a critical appraisal or analysis of the literature is required.

"Writing a Critical Review" is a general guide brochure explaining what critical review of literature is. Your assignment is to read and use it as a guide to write a report in which you critically evaluate the following two research papers:

- Usha, G., Madhavan, P., Vimal Cruz, M., Vinoth, N. A. S., Veena, & Nancy, M. (2021). Enhanced Ransomware Detection Techniques using Machine Learning Algorithms. *2021 4th International Conference on Computing and Communications Technologies (ICCCT).* (pp. 52-58). IEEE.
- Masum, M., Hossain Faruk, M. J., Shahriar, H., Qian, K., Lo, D., & Adnan, M. I. (2022). Ransomware Classification and Detection with Machine Learning Algorithms. *2022 IEEE 12th Annual Computing and Communication Workshop and Conference (CCWC).* (pp. 316-322). IEEE.

Both of the above papers can be accessed online via the University of Chester's Library search page on Moodle (https://portal.chester.ac.uk/LIS/Pages/finding-information.aspx), or alternatively via IEEE Xplore (https://ieeexplore.ieee.org/Xplore/home.jsp)

- You may also find the guidelines outlined in "Writing a Critical Review" helpful; these are provided in the Assignment 1 folder, under 'Assessment', on the CO7115 Moodle page. You can use these guidelines when producing your own notes on the two research papers, then compare and contrast what you have learned, and incorporate that information into your report. (Your notes will not be marked and you do not need to hand them in; they are for your own use only.)
- Once you have completed a draft version of your essay, you <u>must</u> transfer your text to the IEEE Word template provided (also in the Assignment 1 folder) before submitting your work. This step is mandatory and will help you to develop essential skills in formatting academic and industry-standard documents.

This assignment requires you to produce a well-structured essay of up to 2500 words (+ 10% flexibility). As with all your university assessments, you must provide <u>*references in APA7 style*</u> and acknowledge all sources which you have cited or used in the production of your work. You <u>must</u> use the IEEE-style template provided to format your essay before submitting it.

Assessment Criteria

Pass marks will be awarded for a clear, well-structured essay on the given topic, in the correct format (i.e., using the IEEE templated provided) in which all elements of the two papers have been addressed, with appropriate references to relevant theory included. Evidence of comparison between the two source papers is essential, as is evidence of reflection on similarities and differences between them, and the document must be in the correct format.

Higher pass marks will be awarded an essay which includes all the above, with additional evidence of wider reading and research into the subject which goes well beyond the materials covered in lectures.

Top marks will only be awarded for professional level work, e.g., where work is produced to a professional standard and can be used for demonstration to future students, at open days and as part of an online portfolio. Students are reminded that for this to be the case it is essential that all non-original work needs to be referenced correctly in APA style.