University of Hertfordshire UH

School of Computer of Science
ASSIGNMENT BRIEFING SHEET (2016/17 Academic Year)

Assignment Title	DF Portfolio	**Submission Date**	
Module Title	Digital Forensics	**Module Code**	7COM1067
Tutor	**Dr Olga Angelopoulou**	**GROUP or INDIVIDUAL Assignment**	*Individual*

FOR INDIVIDUAL ASSIGNMENTS – *STUDENT TO COMPLETE*

(Comments on this assignment by students can be made on the back of the assignment briefing sheet).
By completing **BOX A** below, I certify that the submitted work is entirely mine and that any material derived or quoted from the published or unpublished work of other persons has been duly acknowledged. **[ref. UPR AS12, section 7 and UPR AS14 (Appendix III)].** I also certify, that any work with human participants has been carried out under an approved ethics protocol in accordance with UPR RE01.
Please print your forename and surname in capitals and provide your ID (srn) number.

BOX A

Student Forename *(in CAPS please)*	Student Surname *(in CAPS please)*	Student ID Number (SRN)	Signature of Student

FOR GROUP ASSIGNMENTS - *STUDENTS TO COMPLETE*

Group Name/Number (if allocated by module team)

(Student comments on this assignment can be made on the back of the assignment briefing sheet)
By completing **BOX B** below, we certify that the submission is entirely ours and that any material derived or quoted from the published or unpublished work of other persons has been duly acknowledged. **[ref. UPR AS/C/6.1, section 7 and UPR AS/C/5 (Appendix III)].)].** We also certify, that any work with human participants has been carried out under an approved ethics protocol in accordance with UPR RE01
*Please print your forenames and surnames in capitals, provide your; - ID numbers, actual time spent on the assignment and your signatures. By signing the submission you certify that this work represents equal contributions from all team members. If this is not the case, the module leader **must** be informed before submission.*

BOX B

Student Forename *(in CAPS please)*	Student Surname *(in CAPS please)*	Student ID Number (SRN)	Actual Time Spent by each Student (hours)	Signature of Student

This sheet must be submitted with the assignment, signed and either BOX A or B filled in.
LATE SUBMISSION WILL ATTRACT A STANDARD LATENESS PENALTY.
1. For undergraduate modules, a score of 40% or above represents a pass mark.
2. For postgraduate modules, a score of 50% or above represents a pass mark.
3. For work submitted up to 5 working days late marked is capped to a bare pass (40% for undergraduate and 50% for postgraduate).
4. For work submitted more than 5 working days late a mark of zero will be awarded for the assignment.

School of Computer of Science
ASSIGNMENT BRIEFING SHEET (2017/18 Academic Year)

THE ASSIGNMENT TASK:

This is an individual assessment comprised of four tasks. Task 1 carries 25%, task 2 carries 50% and task 3 carries 20% of the overall portfolio mark. The final 5% is carried for the overall portfolio conclusion and reflection.

Task 1 will allow you to study issues that influence the investigation of cybercrimes and assess your knowledge in the current technological issues in digital forensics. Task 2 will allow you to adapt digital forensic practises to multiple contexts and assess your understanding in conducting digital evidence in terms of collection and acquisition and also the analysis and evaluation of digital evidence for reporting in a forensically sound manner. Task 3 will assess your theoretical and methodological approaches to the digital forensic investigation.

You are expected to demonstrate an insight into the implications of the problem introduced in each task by using clear and concise arguments. The reports should be well written (and word-processed), showing good skills in creativity and design. Sentences should be of an appropriate length and the writing style should be brief but informative.

During the teaching weeks you will have the opportunity to submit draft copies for some of your portfolio activities. The module team will provide feedback based on your draft copies and advice regarding your progress. The deadline for the complete Portfolio is the **19.04.2018**. You will have to submit a folder that contains all tasks as described below.

Task 1 – "Encryption on Digital Forensic Investigations"

You are required to produce a word-processed report of 1000 words that addresses some of the problems faced by a digital forensics investigator confronted with encrypted data during an investigation. You should refer to the collection, analysis, interpretation, reporting and presentation of the evidence. You should include references to relevant cases in the media, and suggest possible solutions. You should discuss the use of different tools.

The DRAFT deadline for Task 1 is on the **19.02.2018** by electronic submission via StudyNet. You will receive formative feedback on your work, allowing you the opportunity to reflect on your activities and improve your work where necessary. The final copy of Task 1 should be included in the final Portfolio. You are expected to use appropriate peer reviewed sources for developing your arguments, and the Harvard referencing style as per the University regulations.

Task 1, Assessment Criteria	Mark Available
Academic Research	8
Organisation	7
Summary and Conclusions	6
Report structure and References	4
Total	**25**

Task 2 – Digital Forensic Analysis and Reporting

You are required to carry out a forensic examination of the evidence file (Image) that you have been supplied with and forensically examine its contents. You will need to produce an expert witness report that describes the formal investigation methodology that you followed and presents your findings. It is therefore essential that you follow a formal investigation procedure.

You will have to describe in detail the methodology that you followed in order to analyse the evidence file. You will have to identify and describe the procedures for all the different phases of your investigation including the tools you used for the analysis.

Your findings should be presented in a factual way, following the guidelines that were discussed in class. Your findings should include any relevant information that was discovered during your investigation. You should illustrate your analysis with screen dumps of the tools you used.

Your report should be no more than 3000 words.

The DRAFT deadline for Task 2 is on the **19.03.2018** by electronic submission via StudyNet. You will then receive formative feedback on your work to reflect on your activities and improve your work where necessary. The final copy of Task 2 should be included in the final portfolio.

You are expected to use appropriate peer reviewed sources for developing your arguments and the Harvard referencing style as per the University regulations.

Task 2, Assessment Criteria	Mark Available
Case Management	10
Investigation Methodology	10
Analysis and Findings	20
Report Structure and References	10
Total	**50**

Task 3 – Contemporaneous Notes

You need to produce contemporaneous notes that reflect the work you have undertaken for *Task 2* and justify how you maintained the chain of custody. It is advisable you make use of a specialist tool to securely record your digital notes.

There is no word count for this Task.

There is no DRAFT deadline for this Task. The **FINAL** deadline for Task 3 and for the **WHOLE** portfolio is on the **19.04.2018** by electronic submission via StudyNet.

Task 3, Assessment Criteria	Mark Available
Note-taking process	7
Analysis	6
Clarity – Factual notes	7
Total	**20**

Overall Portfolio Conclusion and Reflection

The overall portfolio conclusion, offering your reflection on the undertaken activities and the encountered problems carry **5%** of the overall portfolio mark.

You are expected to use appropriate peer reviewed sources for developing your arguments, and the Harvard referencing style as per the University regulations throughout your portfolio.

MODULE LEARNING OUTCOMES ASSESSED BY THIS ASSIGNMENT:
1.   Issues that influence the investigation of cybercrimes.
2.   Theoretical and methodological approaches to the digital forensic investigation
3.   Adapt digital forensic practises to multiple contexts
4.   Independently conduct digital evidence in the terms of collection and acquisition
5.   Critically analyse and evaluate digital evidence for reporting in a forensically sound manner
6.   Apply knowledge in the current technological issues in digital forensics

SUBMISSION REQUIREMENTS:

All reports (Milestone reports and Final Portfolio report) must be submitted through StudyNet. Please make a note of the following dates on your calendars.

Element	Date
Milestone for Task 1	19.02.2018
Milestone for Task 2	19.03.2018
Portfolio Deadline (including Tasks 3)	19.04.2018

You are expected to unify all of the milestone draft reports into one cohesive portfolio report. The final portfolio report is an academic report and as such the following report structure is expected:

1. Introduction: up to 250 words, where you will discuss your methodology in approaching the assignment.
2. Task 1 (25%)
3. Task 2 (50%)
4. Task 3 (20%)
5. Overall Conclusions and Reflections (5%): up to 250 words, where you will comment on the undertaken activities
6. References: one fused reference list. Do not have a separate reference list for each task of the portfolio,
7. Appendixes

You are required to submit the final portfolio report via StudyNet in a PDF format using your student number as the filename.

FEEDBACK FROM THIS ASSIGNMENT
Formative feedback will be given for the portfolio milestone reports through StudyNet and during the scheduled tutorial sessions. Individual personalised summative feedback will be given through StudyNet for the final submission.
Feedback is not just the marks at the end of the module – it is also the regular verbal advice about your work as you undertake the scheduled activities.

MARKS AWARDED FOR:
Please see next page.

DEADLINES AND ASSIGNMENT WEIGHTINGS

1 This assignment is worth | 100% | of the **overall assessment** for this module.

2 You are expected to spend about | *40* | Hours to complete this assignment to a satisfactory standard

3 Date assignment set | 25.01.2018 | Date completed assignment to be handed in | 19.04.2018

4 Target date for return of marked assignment | 11.05.2018

Marking Scheme

Criteria	Fail (< 50)	Pass (50 – 59)	Reasonable (60 – 69)	Good (70 – 79)	Excellent (>80)
Task 1	Superficial. Little insight shown in selection of material. Covers few/none of key subject issues. Little originality. Has failed to get to grips with the subject. Inadequate discussion. Limited if any conclusions / recommendations missing or inappropriate reached	Reasonable evidence of some insight into the subject area. Arguments reasonably clear but underdeveloped. Student has demonstrated an adequate understanding. Basic recommendations given.	The student has covered most subject areas. A theme is present, but underdeveloped. Analysis draws out appropriate conclusions with supporting recommendations.	Good understanding of the processes and subject area, covering all key issues in a pro-active way. A clear and useful theme is developed. Insight into implications. Contains very few errors.	High academic learning ability achieved. Quality of output showing creative and innovative flair. Clearly structured and logically developed arguments. No errors. Critical thinking.
Task 2	No case management. No methodology, no description of the procedures and of the tools that were used. No analysis. No findings.	Reasonable evidence of some insight into the "paperwork" needed for the investigation. Procedures reasonably clear but underdeveloped. An adequate understanding and a degree of original thinking. Analysis reports on the 'Image' parameters. Basic reporting on the user profiles. Basic recommendations given. May contain some errors.	All of the material is appropriate and most problems were addressed. A clear understanding of the procedures that had to be followed. Appropriate reporting on the user profiles and analysis of their activities. Analysis draws out important lessons learned. Supported recommendations given.	A clear and useful theme is developed. Insight into implications. Clear and concise arguments. Extensive reporting on and analysis of activities. Analysis draws out important lessons learned. Supported recommendations given. Contains very few errors.	Excellent understanding and exposition of relevant issues that shows insight and draws together various investigative techniques. Innovative and well-formed recommendations made. Clearly structured and logically reached findings. No errors.
Task 3	No notes are taken.	Some structure to note taking. Most text has a clear message. Some chain of custody rules have been followed.	Appropriate tool is used for note taking. Most chain of custody rules are followed. The notes have a good structure. Some errors.	Chain of custody rules are followed. The notes are clear and concise. Very few errors.	Excellent note taking method is followed. Critical thinking. Chain of custody is effectively maintained. No errors.

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INTERNAL MODERATION

This assignment has been internally moderated.	*Moderator name, signature and date*
I confirm: • That the assignment set, meets the requirements of the module and that the brief provides appropriate content for students to successfully complete the assignment. • That the assessment is at an appropriate level and matches QAA level descriptors and is an appropriate form of assessment within the total range of assessments for this module. • That the marking scheme is attached and that students can determine how marks are allocated. • That this assessment can be completed **and** marked within University timeframes, and provides detailed feedback (more than just a grade) that supports learning. .	