

PICT8040

Cyber Crime and Cyber Policing

Session 2, In person-scheduled-weekday, North Ryde 2022

Department of Security Studies and Criminology

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General Information

Unit convenor and teaching staff Jeffrey Foster

jeff.foster@mq.edu.au

Credit points

10

Prerequisites

Admission to MPICT or MCPICT or GradDipPICT or GradDipCPICT or PGCertPICT or MPICTMIntSecSt or MCPICTMIntSecSt or MIntSecStud or GradDipIntSecStud or GradCertIntell or MCTerrorism or MCyberSec or GradDipSecStudCr or GradCertSecStudCr or MIntell or MSecStrategicStud or MCrim or MSecStrategicStudMCrim or MSecStrategicStudMIntell or MSecStrategicStudMCyberSec or MSecStrategicStudMCTerrorism or MIntellMCrim or MIntellMCyberSec or MIntellMCTerrorism or MCyberSecMCTerrorism or MCyberSecMCrim or MCTerrorismMCrim or Master of Cyber Security Analysis or MBusAnalytics or MInfoSystMgmt or MInfoTechCyberSec or MInfoTechNetWork or ((Admission to BSecStudMCTerrorism or BSecStudMCrim or BSecStudMCrim or BSecStudMSecStrategicStud) and (50 cp at 2000 level)).

Corequisites

Co-badged status

Unit description

Cybercrime refers to an array of criminal activity including offences against computer data and systems, computer-related offences, content offences, and copyright offences. While early computer hackers were more interested in youthful exploration, modern cybercrime is increasingly about criminal profit and this is reflected in the involvement of transnational organised crime groups. This unit will explore the types of cybercrime, the perpetrators, and investigation techniques.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Understand, analyse, and critically discuss different types of cyber crime activities

with respect to the motivations, methods of operation of offenders, and the types of victims/targets.

ULO2: Demonstrate a comprehensive understanding of past, current cyber threats and future trends in high tech crime.

ULO3: Analyse the impact of cyber crime on government, businesses, society and individuals.

ULO4: Demonstrate a comprehensive understanding of strategies and steps to investigate digital evidence.

General Assessment Information

SUBMITTING ASSESSMENT TASKS

- All text-based assessment tasks are to be submitted, marked and returned electronically.
 This will only happen through the unit iLearn site.
- Assessment tasks must be submitted as a MS word document by the due date.
- Most assessment tasks will be subject to a 'Turnitln' review as an automatic part of the submission process.
- The granting of extensions is subject to the university's Special Consideration Policy.
 Extensions will not be granted by unit conveners or tutors, but must be lodged through Special Consideration: https://students.mq.edu.au/study/my-study-program/special-consideration

Late Assessment Submission Penalty

Unless a Special Consideration request has been submitted and approved, a 5% penalty (of the total possible mark) will be applied each day a written assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a mark of '0' (zero) will be awarded even if the assessment is submitted. Submission time for all written assessments is set at 11.55pm. A 1-hour grace period is provided to students who experience a technical issue.

This late penalty will apply to written reports and recordings only. Late submission of time sensitive tasks (such as tests/exams, performance assessments/presentations, scheduled practical assessments/labs will be addressed by the unit convenor in a Special consideration application.

WORD LIMITS FOR ASSESSMENT TASKS

- Stated word limits include footnotes and footnoted references, but not bibliography, or title page.
- Word limits can generally deviate by 10% either over or under the stated figure.
- If the number of words exceeds the limit by more than 10%, then penalties will apply.
 These penalties are 5% of the awarded mark for every 100 words over the word limit. If a

paper is 300 words over, for instance, it will lose $3 \times 5\% = 15\%$ of the total mark awarded for the assignment. This percentage is taken off the total mark, i.e. if a paper was graded at a credit (65%) and was 300 words over, it would be reduced by 15 marks to a pass (50%).

• The application of this penalty is at the discretion of the course convener.

REASSESSMENT OF ASSIGNMENTS DURING THE SESSION

- Macquarie University operates a Grade Appeal Policy in cases where students feel their work was graded inappropriately: http://www.mq.edu.au/policy/docs/gradeappeal/ policy.html
- In accordance with the Grade Appeal Policy, individual works are not subject to regrading.

Assessment Tasks

| Name | Weighting | Hurdle | Due |
|----------------------|-----------|--------|-------------------------------|
| Research Essay | 50% | No | 11:59PM, 25th of Oct, 2022 |
| Case Study | 30% | No | 11:59PM, 9th Sept., 2022 |
| Weekly Participation | 10% | No | 11:59PM, Sunday of every week |
| Weekly Quizzes | 10% | No | 11:59PM, Sundays Weeks 3-12 |

Research Essay

Assessment Type 1: Essay

Indicative Time on Task ²: 60 hours Due: 11:59PM, 25th of Oct, 2022

Weighting: 50%

Research Essay on Specific Cyber Crime Issue

On successful completion you will be able to:

- Understand, analyse, and critically discuss different types of cyber crime activities with respect to the motivations, methods of operation of offenders, and the types of victims/ targets.
- Demonstrate a comprehensive understanding of past, current cyber threats and future trends in high tech crime.
- Analyse the impact of cyber crime on government, businesses, society and individuals.

 Demonstrate a comprehensive understanding of strategies and steps to investigate digital evidence.

Case Study

Assessment Type 1: Essay Indicative Time on Task 2: 40 hours Due: 11:59PM, 9th Sept., 2022

Weighting: 30%

Cyber Breach Case Study

On successful completion you will be able to:

- Understand, analyse, and critically discuss different types of cyber crime activities with respect to the motivations, methods of operation of offenders, and the types of victims/ targets.
- Demonstrate a comprehensive understanding of past, current cyber threats and future trends in high tech crime.
- Analyse the impact of cyber crime on government, businesses, society and individuals.
- Demonstrate a comprehensive understanding of strategies and steps to investigate digital evidence.

Weekly Participation

Assessment Type 1: Participatory task Indicative Time on Task 2: 13 hours Due: 11:59PM, Sunday of every week

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Weighting: 10%

Weekly participation in weekly discussions

On successful completion you will be able to:

- Understand, analyse, and critically discuss different types of cyber crime activities with respect to the motivations, methods of operation of offenders, and the types of victims/ targets.
- Demonstrate a comprehensive understanding of past, current cyber threats and future trends in high tech crime.
- Analyse the impact of cyber crime on government, businesses, society and individuals.
- Demonstrate a comprehensive understanding of strategies and steps to investigate digital evidence.

Weekly Quizzes

Assessment Type 1: Quiz/Test
Indicative Time on Task 2: 11 hours

Due: 11:59PM, Sundays Weeks 3-12

Weighting: 10%

10 weekly quizzes

On successful completion you will be able to:

- Understand, analyse, and critically discuss different types of cyber crime activities with respect to the motivations, methods of operation of offenders, and the types of victims/ targets.
- Demonstrate a comprehensive understanding of past, current cyber threats and future trends in high tech crime.
- Analyse the impact of cyber crime on government, businesses, society and individuals.
- Demonstrate a comprehensive understanding of strategies and steps to investigate digital evidence.
- ¹ If you need help with your assignment, please contact:
 - the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
 - · the Writing Centre for academic skills support.

Delivery and Resources

UNIT REQUIREMENTS AND EXPECTATIONS

- You should spend an average of 12 hours per week on this unit. This includes listening
 to lectures prior to seminar or tutorial, reading weekly required materials as detailed in
 iLearn, participating in Ilearn discussion forums and preparing assessments.
- Internal students are expected to attend all seminar or tutorial sessions, and external students are expected to make significant contributions to on-line activities.
- In most cases students are required to attempt and submit all major assessment tasks in order to pass the unit.

REQUIRED READINGS

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

The citations for all the required readings for this unit are available to enrolled students
through the unit iLearn site, and at Macquarie University's library site. Electronic copies
of required readings may be accessed through the library or will be made available by
other means.

TECHNOLOGY USED AND REQUIRED

- Computer and internet access are essential for this unit. Basic computer skills and skills in word processing are also a requirement.
- This unit has an online presence. Login is via: https://ilearn.mq.edu.au/
- Students are required to have regular access to a computer and the internet. Mobile devices alone are not sufficient.
- Information about IT used at Macquarie University is available at http://students.mq.edu.au/it_services/

STAFF AVAILABILITY

- Department staff will endeavour to answer student enquiries in a timely manner.
 However, emails or iLearn messages will not usually be answered over the weekend or public holiday period.
- Students are encouraged to read the Unit Guide and look at instructions posted on the iLearn site before sending email requests to staff.

Unit Schedule

Tentative Class Schedule

| Module | Week Starting | Topic | Primary Reading |
|--------|------------------|-----------------------------------|--|
| 1 | 25 Jul 2022 | Intro & Overview | Ch. 1: Technology & Cybercrime |
| 2 | 1 Aug 2022 | History of Cyber Crime | Ch. 3: Computer Hackers & Hacking |
| 3 | 8 Aug 2022 | Cyber Crime Methods | Ch. 4: Malware & Automated Computer Attacks |
| 4 | 15 Aug 2022 | Cyber Crime Motives | Ch. 13: Cybercrime & Criminological Theories |
| 5 | 22 Aug 2022 | Cyber Enabled Crime | Ch. 12: Illicit Market Operations Online |
| 6 | 29 Aug 2022 | Cyber Stalking and Cyber Bullying | Ch. 9: CyberBullying, Online Harassment, & CyberStalking |

| 7 | 5 Sep 2022 | Predatory and Content Crime | Ch. 8: Child Sexual Exploitation Material Offences |
|-----------------------|-------------|---|--|
| InterSession Break | 12 Sep 2022 | | |
| InterSession Break | 19 Sep 2022 | | |
| 8 | 26 Sep 2022 | Financial Cyber Crime | Ch. 6: Online Fraud |
| 9 | 3 Oct 2022 | Cyber Crime Incident Response | TBD |
| 10 | 10 Oct 2022 | Digital Piracy and IP Theft | Ch. 5: Digital Piracy & Intellectual Property Theft |
| 11 | 17 Oct 2022 | Digital Forensics and Cyber Investigation | Ch. 14: Evolution of Digital Forensics |
| 12 | 24 Oct 2022 | Modern Cyber-warfare | Ch. 11: Cyberwarfare & Information Operations Online |
| 13 | 31 Oct 2022 | Wrap-up | |

Please note, exact order of topics may vary during the semester as needed.

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- · Fitness to Practice Procedure
- Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit <u>Student Policies</u> (<u>https://students.mq.edu.au/support/study/policies</u>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.e du.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe <u>academic integrity</u> – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free <u>online writing and maths support</u>, academic skills development and wellbeing consultations.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- Accessibility and disability support with study

- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- · Social support including information about finances, tenancy and legal issues

Student Enquiries

Got a question? Ask us via AskMQ, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.