PICT849

Cyber Policing and Intelligence in Australia

S2 External 2018

Department of Security Studies and Criminology

Contents

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General Information

Unit convenor and teaching staff
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Course Convenor
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Credit points
4

Prerequisites
Admission to MCrim or MPICT or MCPICT or GradDipPICT or GradDipCPICT or PGDipPICT
or GradCertCPICT or MPICTMIntSecSt or MCPICTMIntSecSt or MIntSecStud or
GradDipIntSecStud or GradCertIntSecStud or MCyberSec

Corequisites

Co-badged status

Unit description
The results of a cyberattack can be disastrous, ranging from physical destruction to economic
chaos. Therefore, organisations must develop cyber threat intelligence that enables a more
proactive, over-the-horizon threat awareness posture. In this unit students learn how cyber
intelligence can be used to fight cybercrime and strengthen an organisation's security posture
against a range of adversaries and attack vectors. This includes understanding the role of
cyber intelligence; intelligence tactics, techniques and processes; as well as the intelligence
product and evaluation, analysis and interpretation of cyber intelligence. Cyber policing will be
examined from an intelligence-led policing perspective. As part of this we look at cybercrime,
jurisdictions and extradition, information sharing, and collaboration and cyber policing
challenges. During the unit, students will use a commercial software platform to examine the
application of intelligence analysis processes and procedures.

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:

Critique contemporary literature relating to the concepts of cyber intelligence and policing

Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments

Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly

Evaluate how the intelligence function fits within the dynamic national and internal cyber security context

Critically analyse a case study, demonstrating professional judgment and assessment.

Assessment Tasks

Name	Weighting	Hurdle	Due
Research essay	40%	No	TBC
Intelligence product/report	20%	No	TBC
Group Presentation	20%	No	TBC
Participation/engagement	20%	No	Ongoing

Research essay

Due: **TBC**
Weighting: **40%**

See unit iLearn site for details.

On successful completion you will be able to:

• Critique contemporary literature relating to the concepts of cyber intelligence and policing

• Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments

• Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly

• Evaluate how the intelligence function fits within the dynamic national and internal cyber security context

• Critically analyse a case study, demonstrating professional judgment and assessment.

Intelligence product/report

Due: **TBC**
Weighting: **20%**

See unit iLearn site for details.

On successful completion you will be able to:
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Evaluate how the intelligence function fits within the dynamic national and internal cyber security context
- Critically analyse a case study, demonstrating professional judgment and assessment.

Group Presentation

Due: **TBC**
Weighting: **20%**

See iLearn site for details.

On successful completion you will be able to:
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Evaluate how the intelligence function fits within the dynamic national and internal cyber security context
- Critically analyse a case study, demonstrating professional judgment and assessment.

Participation/engagement

Due: **Ongoing**
Weighting: **20%**

See unit iLearn page for details.

On successful completion you will be able to:

- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments

Delivery and Resources

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

- 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/

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 'Turnitin' review as an automatic part of the submission process.
- The granting of extensions is subject to the university's Disruptions Policy. Extensions will not in normal circumstances be granted by unit conveners or tutors, but must be

lodged through Disruption to Study: http://www.students.mq.edu.au/student_admin/ manage_your_study_program/disruption_to_studies/.

LATE SUBMISSION OF ASSESSMENT TASKS

- If an assignment is submitted late, 5% of the available mark will be deducted for each day (including weekends) the paper is late.
- For example, if a paper is worth 20 marks, 1 mark will be deducted from the grade given for each day that it is late (i.e. a student given 15/20 who submitted 4 days late will lose 4 marks = 11/20).
- The same principle applies if an extension is granted and the assignment is submitted later than the amended date.

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 x 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 SEMESTER

- 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.

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

Week 1 - Introduction to cyber policing and intelligence

Week 2 - Knowing ourselves and knowing our enemies

Week 3 - Cyber threat intelligence and counterintelligence

Week 4 - Strategic, operational and tactical cyber intelligence

Week 5 - The intelligence cycle

Week 6 - Sources of intelligence

Week 7 - Investigation techniques

Week 8 - The intelligence product and tools

Week 9 - Cybercrime theories

Week 10 - Policing models

Week 11 - Information sharing, collaboration and privacy

Week 12 - Cybercrime, jurisdiction and extradition

Week 13 - Unit review

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). 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
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy *(**Note:** The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.)*

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

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/p

olicy-central).

Student Code of Conduct

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

Results

Results shown in *iLearn*, 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.

Student Support

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

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

Student Services and Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

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 Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their

professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

Learning outcomes

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Evaluate how the intelligence function fits within the dynamic national and internal cyber security context
- Critically analyse a case study, demonstrating professional judgment and assessment.

Assessment tasks

- Research essay
- Intelligence product/report
- Group Presentation
- Participation/engagement

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

Learning outcomes

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Evaluate how the intelligence function fits within the dynamic national and internal cyber security context
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Assessment tasks

- Research essay
- Intelligence product/report
- Group Presentation
- Participation/engagement

PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

Learning outcomes

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
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Assessment tasks

- Research essay
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PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

Learning outcomes

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly
- Critically analyse a case study, demonstrating professional judgment and assessment.

Assessment tasks

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PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

Learning outcomes

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Demonstrate higher order communication skills including the ability to formulate sustained, persuasive and original written and oral arguments
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly

Assessment tasks

- Research essay
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- Group Presentation
- Participation/engagement

PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in

relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

Learning outcomes

- Critique contemporary literature relating to the concepts of cyber intelligence and policing
- Model academic research skills, particularly the ability to select sources appropriately to integrate knowledge from diverse sources, to critically evaluate its significance and relevance, synthesise material and present finding logically, rationally and lucidly

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