INFO843

Project and Risk Management

S2 Evening 2018

Dept of Computing

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Disclaimer

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General Information

Unit convenor and teaching staff
Convenor, Lecturer
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Post Lecture

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Credit points
4

Prerequisites
Admission to MBiotech or MBiotechMCom or MBioBus or MLabQAMgt or PGCertLabQAMgt or GradDipLabQAMgt or GradCertLabQAMgt or GradDipBioTech

Corequisites

Co-badged status

Unit description
This unit consists of a number of essential project and risk management themes, agile development methodologies and team management. Topics include project definition, roles and responsibilities, resource management, time and cost estimation, project planning, project control and reporting, measuring project success and post-implementation review. Microsoft Project 2013 is used to assist with resource allocation, costing and scheduling. The International Standard, ISO 31000, gives us excellent guidance on risk management. Agile methodologies are particularly relevant given the complexity and rapid change that characterise science projects. Finally, the unit considers understanding organisational culture, politics and how to manage local and global teams.

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:

> Apply an understanding of the contextual issues of a project to the identification and management of expectations of the main project stakeholders.

Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2016.
Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and incorporate appropriate components into the planning for complex projects.
Analyse Project risks and formulate a risk management plan compliant with the international standard, ISO31000.
Critically evaluate the role of the Project manager and how to handle organization politics, individual and team management.

General Assessment Information

Submission methods for assessment tasks:

All soft copy assignment submissions and return of marks and comments will be done through the INFO843 page on iLearn.

Late submission:

Late submission of individual work will incur a 10% penalty for every 24 hours, or part thereof, it is late. So within 24 hours, the maximum mark that can be obtained is 90% of the full grade for that assessment task; between 24 and 48 hours, the maximum mark that can be obtained is 80% of the full grade; and so on. No extra documentation is required unless the student does wish to have an extension (see below) applied.

Late submissions of group based assignments are not permitted unless under exceptional circumstances with documentary evidence provided to the unit convenor which may include medical certificates as per the Department of Computing policy. One person being sick does not mean the group cannot submit work. Students are recommended to have a backup plan for group based submissions.

Extensions and Disruptions:

Extensions without a grade penalty may be provided to individuals who contact student services BEFORE the due date and can provide documentary evidence of illness or other misadventure and succeed in gaining a certified disruption. (Health issues will require a university issued Professional Authority Form.). If approved, a new submission timeline and submission method will be discussed on a case by case basis.

Students are strongly advised to contact the unit convenor as early as possible if there are any issues that will not make an on-time submission possible.

If you apply for Disruption to Study for your **final examination**, you must make yourself available for the week of ***December 11th - 15th***. If you are not available at that time, there is no guarantee an additional examination time will be offered. Specific examination dates and times will be determined at a later date.

Final Exam :

The final exam will focus on content covered in the classes throughout the semester including all lectures, references and workshops.

Assessment Tasks

Name	Weighting	Hurdle	Due
Assignment 1	15%	No	Week 5
Assignment 2	15%	No	Week 8
Assignment 3	20%	No	Week 12
Final Examination	50%	No	Weeks 14 to 15

Assignment 1

Due: **Week 5**
Weighting: **15%**

You are given the tasks, resources and schedule for a project which need to be entered into MS Project 2016. You are required to answer a series of questions on the resource requirements, critical path, schedule and costs associated with this project. You are given the tasks, resources and schedule for a project which need to be entered into MS Project 2016. You are required to answer a series of questions on the resource requirements, critical path, schedule and costs associated with this project.

On successful completion you will be able to:

- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2016.

Assignment 2

Due: **Week 8**
Weighting: **15%**

We consider the recent failed Victoria Police LINK project. We study the KPMG Link Review from 2011 and subsequent media reports, and analyse the project failings and make recommendations that apply elements of the course to put the project back on track.

On successful completion you will be able to:

- Apply an understanding of the contextual issues of a project to the identification and management of expectations of the main project stakeholders.
- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and incorporate appropriate components into the planning for complex projects.
- Analyse Project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the Project manager and how to handle organization politics, individual and team management.

Assignment 3

Due: **Week 12**
Weighting: **20%**

Students will be formed into groups. Students will need to discuss with the group what industry they would like to focus on. Your team are consultants recommending your project and risk strategy to secure a go-ahead from the client organisation. Your focus is on the project process/ methodology and risk management plan to suit your project and client organisation. Groups will present to their 'clients' in Week 12.

Each group member will be allocated a component of the group work to complete and will present his/her component and be marked on their individual presentation.

On successful completion you will be able to:

- Apply an understanding of the contextual issues of a project to the identification and management of expectations of the main project stakeholders.
- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2016.
- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and incorporate appropriate components into the planning for complex projects.
- Analyse Project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the Project manager and how to handle organization politics, individual and team management.

Final Examination

Due: **Weeks 14 to 15**
Weighting: **50%**

Final Written Exam

Due: **Examination Period** Weighting: 50%

Examination conditions

Three (3) hour exam plus 10 minutes reading time.

Supplementary Exams

If you apply for Disruption to Study for your final examination, you must make yourself available for the week of Dec 11 – 15, 2017. If you are not available at that time, there is no guarantee an additional examination time will be offered. Specific examination dates and times will be determined at a later date.

On successful completion you will be able to:

- Apply an understanding of the contextual issues of a project to the identification and management of expectations of the main project stakeholders.
- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2016.
- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and incorporate appropriate components into the planning for complex projects.
- Analyse Project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the Project manager and how to handle organization politics, individual and team management.

Delivery and Resources

Classes

Each week you should attend a two-hour seminar/lecture. In addition to this we have non compulsory research time. We have booked the class to allow for you to use the space for research for individual and group assessments. For details of days, times and rooms consult the timetables webpage. You are also welcome to use the EMC computer lab when you require.

Required and Recommended Texts:

Students are expected to purchase and read the following etextbook:

Erik Larson et al, EBOOK Project Management: The Managerial Process 7e***, McGraw Hill.*** This book is available HERE

The following text book is suggested as recommended reading. Copies are available

from the references and general sections of the library.

Rob Thomsett, Radical Project Management, Prentice Hall, 2002

The class Web site will have copies of lecture handouts and additional recommended reading material: https://ilearn.mq.edu.au/ You will need to use the user name and password issued to you by the University Administration when you enrolled for the unit.

Technology to be used and required:

We are using MS Project 2013 or 2016. These apps will be available in the EMC lab and available for free download from the Microsoft MQU Dreamspark website for STEM students.

Other technology required is MS Word and MS PowerPoint.

Website and access to unit material:

The web page and content for this unit can be found at iLearn: https://ilearn.mq.edu.au/login/MQ/. Note that the unit content is not publicly available and requires for you to log in to access.

Unit Schedule

Week	Topic	Reading
1	Course Structure Types of Projects, Role of the Project Manager, IS/IT Projects are Different Class Exercise, Personal Health Records Project	Unit Outline Larson 1 and Readings
2	Project Definition Introduction to MS Project Hand out Assignment One (Individual Assignment) 'MS Project 2016 for Schedule, Resources and Costing'	Larson 4 Erik Larson Videos
3	Estimating Project Times and Costs Sponsors and Other Stakeholders	Larson 5 Larson 10
4	Project Selection and Success Criteria Hand out Assignment Two (Individual Assignment) 'Project Process Plan for the Victoria Police Link System' Hand out Assignment Three (Group Assignment) 'IS Project Management Plan' Larson 2	Larson 2
5	Risk Management Part 1 **Assignment 1 Due**	Guest Lecture: Dr. Stephen Smith

6	Risk Management Part 2	Refer to lecture notes
7	Virtual Teams and Outsourcing Project Audit and Closure	Accenture, 2015 Larson 12 Larson 14
8	Leadership Team Management **Assignment Two Due**	Larson 10 Larson 11 Thomsett articles
9	Rational Unified Process RUP Structure and Navigation RUP for COTS	IBM Sources
10	Project Plan Structure Progress Management and Evaluation	Larson 6, 10, 12
11	Organisational Politics	13
12	**Assignment Three Due** Group Presentations	
13	Final Exam Revision	

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/policy-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

- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and incorporate appropriate components into the planning for complex projects.
- Analyse Project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the Project manager and how to handle organization politics, individual and team management.

Assessment tasks

- Assignment 2
- Assignment 3
- Final Examination

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

- Apply an understanding of the contextual issues of a project to the identification and management of expectations of the main project stakeholders.
- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2016.
- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and incorporate appropriate components into the planning for complex projects.
- Analyse Project risks and formulate a risk management plan compliant with the

international standard, ISO31000.

- Critically evaluate the role of the Project manager and how to handle organization politics, individual and team management.

Assessment tasks

- Assignment 1
- Assignment 2
- Assignment 3
- Final Examination

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

- Apply an understanding of the contextual issues of a project to the identification and management of expectations of the main project stakeholders.
- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2016.
- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and incorporate appropriate components into the planning for complex projects.
- Analyse Project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the Project manager and how to handle organization politics, individual and team management.

Assessment tasks

- Assignment 1
- Assignment 2
- Assignment 3
- Final Examination

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

- Apply an understanding of the contextual issues of a project to the identification and management of expectations of the main project stakeholders.
- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2016.
- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and incorporate appropriate components into the planning for complex projects.
- Analyse Project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the Project manager and how to handle organization politics, individual and team management.

Assessment tasks

- Assignment 1
- Assignment 2
- Assignment 3
- Final Examination

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

- Apply an understanding of the contextual issues of a project to the identification and management of expectations of the main project stakeholders.
- Develop, maintain, manage and report against a project plan which defines the critical path and resource requirements, with tool support, such as MS Project 2016.

- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and incorporate appropriate components into the planning for complex projects.
- Analyse Project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the Project manager and how to handle organization politics, individual and team management.

Assessment tasks

- Assignment 1
- Assignment 2
- Assignment 3
- Final Examination

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

- Critically evaluate the concepts of agile methodologies such as the Rational Unified Process, DSDM and incorporate appropriate components into the planning for complex projects.
- Analyse Project risks and formulate a risk management plan compliant with the international standard, ISO31000.
- Critically evaluate the role of the Project manager and how to handle organization politics, individual and team management.

Assessment tasks

- Assignment 2
- Assignment 3
- Final Examination

Changes from Previous Offering

This unit has been aligned more to its sister unit ITEC841.

Standards

Four standards, namely HD, D, CR, P summarize as many different levels of achievement. Each standard is precisely defined to help students know what kind of performance is expected to deserve a certain mark. The standards corresponding to the learning outcomes of this unit are given below:

HD	Apply techniques and knowledge in new contexts, show breadth and depth of understanding of quality evaluation, estimation measurement, project risk planning and measurement. Can use MS Project to solve problems with high accuracy.	A sound grounding in how projects can be managed in regards to quality assurance and risk assessment. Show breadth and depth of understandings on issues in the management of IT systems, including: change management, configuration management and planning and People management, Able to apply these techniques and knowledge in new contexts.	Demonstrate leadership, creativity,critical thinking and analysis skills. Enthusiatic in acquring new knowledge in the IS project management area. Demonstrate capability in applying new IS project management knowledge to solve real-world problems. Conduct team work effectively and play a key role in moving the whole project team forward.
D	Apply techniques and knowledge in some new contexts, show breadth and depth of understanding across most of the topics including: quality evaluation, estimation measurement, project risk planning and measurement. Can use MS Project to solve problems, with limited errors.	A sound grounding in most topics related to how projects can be managed in regards to quality assurance and risk assessment. Show breadth and depth of understandings on most issues in the management of IT systems, including: change management, configuration management and planning and People management, Able to apply these techniques and knowledge in some new contexts.	Demonstrate some leadership occasionally. Show creativity, critical thinking and analysis skills. Have the capability in applying IS project management knowledge to solve real-world problems. Collaborate with team members well and finish assigned tasks on time and with good quality.
CR	Show breadth of understanding across most of the topics including: quality evaluation, estimation measurement, project risk planning and measurement. Have fundamental knowledge about how to use MS Project, but with some non-major errors.	Understands some aspects of how projects can be managed in regards to quality assurance and risk assessment. Show breadth of understandings on most issues in the management of IT systems, including: change management, configuration management and plannig and People management.	Demonstrate analysis skills in some occasions. Know how to apply IS project management knowledge to solve some of the real-world problems. Able to finish assigned tasks on time and with good quality most of the time.
P	Can reproduce definitions and ideas, show some breadth of understanding of the topics including: quality evaluation, estimation measurement, project risk planning and measurement. Some knowledge about MS Project with a few major misunderstandings or mistakes.	Can reproduce some defintions and ideas, show some breadth on issues in the management of IT systems, including: change management, configuration management and plannig and people management.	Demonstrate limited analysis skills. Can apply IS project management knowledge to solve limited real-world problems. Able to finish all assigned tasks on time and with acceptable quality.

Grading

At the end of the semester, you will receive a grade that reflects your achievement in the unit

- **Fail (F)**: does not provide evidence of attainment of all learning outcomes. There is

missing or partial or superficial or faulty understanding and application of the fundamental concepts in the field of study; and incomplete, confusing or lacking communication of ideas in ways that give little attention to the conventions of the discipline.

- **Pass (P)**: provides sufficient evidence of the achievement of learning outcomes. There is demonstration of understanding and application of fundamental concepts of the field of study; and communication of information and ideas adequately in terms of the conventions of the discipline. The learning attainment is considered satisfactory or adequate or competent or capable in relation to the specified outcomes.
- **Credit (Cr)**: provides evidence of learning that goes beyond replication of content knowledge or skills relevant to the learning outcomes. There is demonstration of substantial understanding of fundamental concepts in the field of study and the ability to apply these concepts in a variety of contexts; plus communication of ideas fluently and clearly in terms of the conventions of the discipline.
- **Distinction (D)**: provides evidence of integration and evaluation of critical ideas, principles and theories, distinctive insight and ability in applying relevant skills and concepts in relation to learning outcomes. There is demonstration of frequent originality in defining and analysing issues or problems and providing solutions; and the use of means of communication appropriate to the discipline and the audience.
- **High Distinction (HD)**: provides consistent evidence of deep and critical understanding in relation to the learning outcomes. There is substantial originality and insight in identifying, generating and communicating competing arguments, perspectives or problem solving approaches; critical evaluation of problems, their solutions and their implications; creativity in application.

In this unit, your final mark is calculated by combining the marks for all assessment task according to the percentage weightings shown in the assessment summary which total up to 100,

In particular, **in order to pass the unit**, you must obtain:

- a mark of 50 or above out of 100 for the total of all assessments

Students can obtain a higher grade than a Pass (P) by meeting the above requirements and

- obtain a mark of 65 - 74 out of 100 to receive a Credit (Cr)
- obtain a mark of 75 - 84 out of 100 to receive a Distinction (D)
- obtain a mark of 85 -100 out of 100 to receive a High Distinction (HD)

INFO843 is a unit where continued levels of engagement throughout the semester are hugely beneficial. This is reflected in the assessment tasks as 50% of the unit assessment happens

prior to the final exam. Students are encouraged to manage their workload, engage in discussion in classes, and be active participants in their own learning and exploration of the concepts of the unit.