General Information

Unit convenor and teaching staff
Convenor
Malcolm Ryan
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Contact via malcolm.ryan@mq.edu.au
E6A rm 325
Thurs 5-6pm

Credit points
3

Prerequisites
39cp and COMP260 and MECO319

Corequisites
COMP330 or MECO329

Co-badged status

Unit description
Students will work in groups to create a videogame using a commercial-level game engine. This will enable them to apply their previously acquired skills in videogame design and implementation to a substantial project. Teams will be expected to develop their own concept for the game. This will require creative design, the production of supporting documentation, quality control, and other associated skills and concepts. Teams will be expected to produce a compelling game proposal and meet regular agreed milestones as well as producing game documentation and giving a final presentation.

Important Academic Dates
Information about important academic dates including deadlines for withdrawing from units are available at http://students.mq.edu.au/student_admin/enrolmentguide/academicdates/

Learning Outcomes

1. Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
2. Have further developed their ability to turn creative ideas in actual products, including the tradeoffs necessary in this process
3. Understand and be able to make use of the basic principles of project management, teamwork, the roles and responsibilities of the project manager and appreciate the importance of working closely with the project's client and the delivered game's target audience.

4. Have improved their communication skills, both oral and written, in describing and documenting their game design work.

### Assessment Tasks

<table>
<thead>
<tr>
<th>Name</th>
<th>Weighting</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitch</td>
<td>5%</td>
<td>Week 3</td>
</tr>
<tr>
<td>Project Plan</td>
<td>5%</td>
<td>Week 4</td>
</tr>
<tr>
<td>Milestone 1</td>
<td>10%</td>
<td>Week 6</td>
</tr>
<tr>
<td>Milestone 2</td>
<td>10%</td>
<td>Week 9</td>
</tr>
<tr>
<td>Complete game</td>
<td>10%</td>
<td>Week 13</td>
</tr>
<tr>
<td>Design document</td>
<td>20%</td>
<td>Week 14</td>
</tr>
<tr>
<td>Playtesting report</td>
<td>20%</td>
<td>Week 14</td>
</tr>
<tr>
<td>Post-mortem</td>
<td>20%</td>
<td>Week 14</td>
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</tbody>
</table>

**Pitch**

**Due:** **Week 3**  
**Weighting:** 5%

A pitch of a proposed design to clients. Should include:

1. Design outline
2. Storyboards
3. Art style
4. Technology requirements
5. Intended milestone targets

This Assessment Task relates to the following Learning Outcomes:

- Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
• Have improved their communication skills, both oral and written, in describing and documenting their game design work.

Project Plan

Due: Week 4
Weighting: 5%

A revised written project planned based on feedback from the pitch.

This Assessment Task relates to the following Learning Outcomes:
• Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
• Understand and be able to make use of the basic principles of project management, teamwork, the roles and responsibilities of the project manager and appreciate the importance of working closely with the project's client and the delivered game's target audience

Milestone 1

Due: Week 6
Weighting: 10%

A prototype and progress report based on the agreed milestone targets.

This Assessment Task relates to the following Learning Outcomes:
• Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
• Have further developed their ability to turn creative ideas in actual products, including the tradeoffs necessary in this process
• Understand and be able to make use of the basic principles of project management, teamwork, the roles and responsibilities of the project manager and appreciate the importance of working closely with the project's client and the delivered game's target audience

Milestone 2

Due: Week 9
Weighting: 10%

A prototype and progress report based on agreed milestone targets
This Assessment Task relates to the following Learning Outcomes:

- Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
- Have further developed their ability to turn creative ideas into actual products, including the tradeoffs necessary in this process.
- Understand and be able to make use of the basic principles of project management, teamwork, the roles and responsibilities of the project manager and appreciate the importance of working closely with the project's client and the delivered game's target audience.

Complete game
Due: **Week 13**
Weighting: **10%**

Final game presented to sponsor. Mark is determined by sponsor.

This Assessment Task relates to the following Learning Outcomes:

- Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
- Have further developed their ability to turn creative ideas into actual products, including the tradeoffs necessary in this process.
- Understand and be able to make use of the basic principles of project management, teamwork, the roles and responsibilities of the project manager and appreciate the importance of working closely with the project's client and the delivered game's target audience.

Design document
Due: **Week 14**
Weighting: **20%**

A thorough description of the final game mechanics of the game, justified in terms of the effect they are intended to achieve.

This Assessment Task relates to the following Learning Outcomes:

- Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
• Have further developed their ability to turn creative ideas into actual products, including the tradeoffs necessary in this process.
• Have improved their communication skills, both oral and written, in describing and documenting their game design work.

Playtesting report
Due: **Week 14**
Weighting: **20%**

A description of the playtesting process applied to the game including:

1. The hypotheses being tested
2. The experiment design
3. The results

This Assessment Task relates to the following Learning Outcomes:
• Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
• Have improved their communication skills, both oral and written, in describing and documenting their game design work.

Post-mortem
Due: **Week 14**
Weighting: **20%**

A report reflecting on the project including:

1. What aspects of the final game were successful/unsuccessful
2. What aspects of the group-work process were helpful/unhelpful

This Assessment Task relates to the following Learning Outcomes:
• Understand and be able to make use of the basic principles of project management, teamwork, the roles and responsibilities of the project manager and appreciate the importance of working closely with the project's client and the delivered game's target audience.
• Have improved their communication skills, both oral and written, in describing and documenting their game design work.
**Delivery and Resources**

COMP352 projects will be sponsored by clients from industry.

**CLASSES**

Please ensure you attend the first lecture session on Thursday 7th August 2014 as you will be allocated into groups in that class. You are expected to attend at least all compulsory class meetings throughout the year to be eligible to pass the unit.

In week 2 the Careers Development Office will run a "Working in Teams" workshop. Attendance is compulsory. If you have a valid reason not to attend a class (work is not a valid reason), you must get approval from the convenor before the class. In the event of illness or misadventure, contact the convenor ASAP.

**REQUIRED AND RECOMMENDED TEXTS AND/OR MATERIALS**

There is no prescribed text for this unit.

**UNIT WEBPAGE**

Please login to ilearn http://ilearn.mq.edu.au/

**TECHNOLOGIES USED AND REQUIRED**

The technology you use will depend on your client’s needs. You will have access to the games lab computers and the software on them. Extra software required may be added if a good case can be made for it. You may also want to use resources that your sponsor and team members have access to. Your technology needs will be determined and defined by you in your project plan.

**Unit Schedule**

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPIC</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Groups allocated, project management introduction - compulsory</td>
</tr>
<tr>
<td>2</td>
<td>&quot;Working in Teams&quot; workshop - location E7B T2 (To be confirmed) - compulsory</td>
</tr>
<tr>
<td>3</td>
<td>Pitches to industry sponsors - compulsory</td>
</tr>
<tr>
<td>4</td>
<td>No classes/lectures</td>
</tr>
<tr>
<td>5</td>
<td>No classes/lectures</td>
</tr>
<tr>
<td>6</td>
<td>Milestone 1 presentations</td>
</tr>
<tr>
<td>7</td>
<td>No classes/lectures</td>
</tr>
</tbody>
</table>
Learning and Teaching Activities

Week 1 Team Allocation
COMPULSORY - groups allocated, project management introduction. Location Y3A T1

Week 2 "Working in Teams" workshop
COMPULSORY - location Y3A T1 (To be confirmed)

Week 3 Lectures/Revision
on project plans, requirements documents, UML, Design and testing

Week 13 or 14
COMPULSORY - Group presentation of system (date to be announced in second half of semester)

Learning and Teaching Strategies
COMP/ISYS355 is taught through the involvement in a group project. Much of what is learnt is gained through experience and problem solving at the individual and group level. The unit will require the student to apply knowledge and skills gained in previous units and also require the student to acquire new knowledge and skills which will vary for each student and project according to the problem needing to be solved. The content of the unit includes: Self-study of previous learning material and resources found online and at your organisation. Identification of knowledge and skill gaps and how to address these training needs via self-study. Preparation of a detailed project proposal and plan. Undertaking an extended group project. Preparation of intermediate and final project deliverables. Acceptance of project deliverable(s) by customer. Preparation of a final reflective report. A group project presentation.

Learning and Teaching Tips
To be successful you should: Meet with your group regularly, ideally weekly. Make sure you take notes, set agendas and action items and at the start of each meeting check the status of all
action items. Attend the compulsory class sessions. Read appropriate material to support the
technical and management aspects of your project. Perform the tasks assigned to you.
Undertake self-study to acquire missing knowledge and skills needed for your particular project.
Continually review and revise your project plan and ensure you are working to meet delivery of
milestones by the specified time.

**Policies and Procedures**

Macquarie University policies and procedures are accessible from Policy Central.
Students should be aware of the following policies in particular with regard to
Learning and Teaching:


In addition, a number of other policies can be found in the Learning and Teaching Category of
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/support/student_conduct/](https://students.mq.edu.au/support/student_conduct/)

Special consideration policy of the Department of Computing:


**Plagiarism**

Please refer to the Department of Computing Plagiarism Policy for the definition of plagiarism,
advice on avoiding it and the penalties in place if you are found to have submitted plagiarised
work.

**Student Support**

Macquarie University provides a range of support services for students. For details, visit [http://students.mq.edu.au/support/](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 Enquiry Service
For all student enquiries, visit Student Connect at ask.mq.edu.au

Equity 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.

IT Help
For help with University computer systems and technology, visit http://informatics.mq.edu.au/help/.

When using the University’s IT, you must adhere to the Acceptable Use Policy. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

Discipline Specific Knowledge and Skills
Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

Learning outcomes

- Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
- Have further developed their ability to turn creative ideas in actual products, including the tradeoffs necessary in this process
Assessment tasks

• Pitch
• Project Plan
• Milestone 1
• Milestone 2
• Complete game
• Playtesting report

Problem Solving and Research Capability

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

Learning outcomes

• Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
• Have further developed their ability to turn creative ideas in actual products, including the tradeoffs necessary in this process

Assessment tasks

• Pitch
• Project Plan
• Milestone 1
• Milestone 2
• Complete game
• Playtesting report

Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.

This graduate capability is supported by:
Learning outcomes

- Be able to apply the spiral-design process (prototyping and playtesting) to a large scale video game design and development project.
- Have further developed their ability to turn creative ideas in actual products, including the tradeoffs necessary in this process

Assessment tasks

- Pitch
- Project Plan
- Milestone 1
- Milestone 2
- Complete game
- Playtesting report

Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

Learning outcome

- Have improved their communication skills, both oral and written, in describing and documenting their game design work.

Assessment tasks

- Design document
- Playtesting report
- Post-mortem

Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:
Learning outcome

• Understand and be able to make use of the basic principles of project management, teamwork, the roles and responsibilities of the project manager and appreciate the importance of working closely with the project’s client and the delivered game’s target audience

Assessment tasks

• Project Plan
• Milestone 1
• Milestone 2
• Complete game
• Post-mortem

Grading and Passing

Your final grade will depend on your performance in the project. In particular:

• You must contribute to all parts of the project (and your team members should agree) in order to pass this unit.
• You must attend all compulsory class sessions or have been given prior approval not to attend or provide medical evidence of why you could not attend.
• At the end of the course, in rare circumstances and at the discretion of the unit convenor, a bonus mark of up to 5% will be awarded to any student who repeatedly demonstrated exceptional performance, dedication and engagement with the unit. This attainment will typically be identified by comments from the client, other team members and/or my observation of the student.

All work submitted should be readable and presented in a business-like and professional format.

Late work will not be accepted. As you are working in a team and also are expected to perform risk management, sickness or other misadventure needs to be planned for and managed.

Grade Assessment Standards

<table>
<thead>
<tr>
<th></th>
<th>Has participated in group-based projects which delivered satisfactory outputs throughout the semester.</th>
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<tbody>
<tr>
<td>P</td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>Has participated in group-based projects throughout the semester which delivered quality outputs.</td>
</tr>
<tr>
<td>Grade</td>
<td>Description</td>
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</tr>
<tr>
<td>D</td>
<td>Has participated in group-based projects throughout the semester which consistently delivered high quality outputs. All the assignment, practical and tutorial tasks (programming and written) completed to a very high standard.</td>
</tr>
<tr>
<td>HD</td>
<td>Has participated in group-based projects throughout the semester which consistently delivered high quality outputs. Students achieving this grade are often distinguished by a high level of effort, enthusiasm, competence and often leadership in their project groups.</td>
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