# Objective

The objective of this course is to develop the students’ understanding of the issues involved in managing Information Systems projects. The course imparts practical knowledge of the skills and techniques used to manage information systems projects.

The success of many organisations depends on their ability to harness the power of information technology, but many information systems implemented by organisations either fail completely or do not live up to their potential. Organisations are recognising that it is many of the “behind the scenes” activities that result in a successful information system and are investing in project managers and their education.

Project managers need many skills above and beyond the technical skills required to implement information systems. Management of time, scope and cost are vital, as are the “soft” skills of managing the team and communicating with the stakeholders.

## Lecturer

Mairéad Hogan  
ext: 3007  
e-mail:mairead.hogan@nuigalway.ie

## Times

Lectures: Wednesdays 11am – 1pm, Room 118 Cairnes building

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## Overall Learning Outcomes

Upon completion of this course you will be able to:

- Understand the importance of project management certification
- Describe the project management process groups
- Describe the process of project integration management
- Understand the importance of project scope management and use various techniques to manage scope
- Understand the importance of project time management and how to use various techniques to manage time
- Describe human resource management and its role in project management
- Understand the importance of project quality management and how to use various techniques to manage time
- Understand project communications management and its role in project management
- Understand risk management and techniques to manage risk in projects
- Understand the importance of, and be able to conduct, project
The course comprises one weekly 2-hour lecture across 12 weeks.

Programme(s)
- 4BF1(4th year BSc in Informations Systems)
- B.Comm (3rd year B.Comm and 4th B.Comm with languages)

Course Material
Content is available at https://nuigalway.blackboard.com

Assessment
1. End of year Examination 60%
2. Continuous Assessment 40%*

* Continuous assessment involves the completion and submission of two group-based assignments worth 40% of the available marks. The examination will carry 60% of the available marks.

Note: A minimum of 35% is required in the final written examination before marks for continuous assessment can be included in the determination of the overall mark for the subject.

Workload
- Credit weighting: 5 ECT
- Lecture hours: 24
- Group assignment work: 26
- Independent study: 53
- Associated time: 20
- Examination: 2
- Total Student Effort: 125 hours

Required Text (Students need their own copy):

Secondary Texts: (These do not need to be purchased)

Additional Reading: (These do not need to be purchased)
Kerzner, Harold, Project Management Case Studies, 3rd Edition
ISBN: 978-0-470-27871-0

ISBN: 978-0-470-19558-1


<table>
<thead>
<tr>
<th>Topic</th>
<th>Readings</th>
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<tbody>
<tr>
<td><strong>Week 1 Introduction to Project Management</strong></td>
<td>Schwalbe Ch. 1</td>
</tr>
<tr>
<td>• What is a project?</td>
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<tr>
<td>• What is project management, including the project management knowledge areas?</td>
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<tr>
<td>• Program and project portfolio management</td>
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<tr>
<td>• The role of the project manager</td>
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<td>• The project management profession</td>
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<tr>
<td><strong>Week 1 Outcomes: You will be able to …</strong></td>
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<tr>
<td>• Explain what is meant by a project and project management</td>
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<td>• Describe the project management knowledge areas</td>
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<tr>
<td>• Describe program and project portfolio management</td>
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<td>• Describe the role of the project manager and the skills that are important to the project manager</td>
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<td>• Discuss the project management profession</td>
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<tr>
<td><strong>Week 2: Project Integration Management</strong></td>
<td>Schwalbe Ch 4</td>
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<tr>
<td>• What is Project integration management?</td>
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<td>• Strategic planning and project selection</td>
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<td>• Preliminary scope statements</td>
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<td>• Project management plans</td>
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<td>• Project execution</td>
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<td>• Monitoring and controlling project work</td>
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<td>• Integrated change control</td>
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<td>• Closing projects</td>
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<td>• Using software to assist in project integration management</td>
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</tbody>
</table>
### Week 2 Outcomes: You will be able to …

- Describe project integration management
- Discuss strategic planning and project selection
- Describe preliminary scope statements
- Discuss how to develop and the purpose of project management plans
- Describe what is involved in project execution
- Discuss the importance of monitoring and controlling project work
- Describe integrated change control
- Discuss project closure
- Describe how software can assist in project integration management

### Week 3: Project Scope Management

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Schwalbe Ch 5</th>
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</thead>
<tbody>
<tr>
<td>Project scope management</td>
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<tr>
<td>Collecting requirements</td>
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<tr>
<td>Scope definition</td>
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<tr>
<td>Creating the work breakdown structure</td>
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<td>Scope verification</td>
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<td>Scope control</td>
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<tr>
<td>Using software to assist in project scope management</td>
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### Week 3 Outcomes: You will be able to …

- Describe what is meant by project scope management
- Describe scope planning
- Describe scope definition
- Describe and use different ways to develop a work breakdown structure
- Describe scope verification
- Describe how to control the scope on a project
- Describe how software can assist in project scope management

### Week 4: Project Time Management

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Schwalbe Ch 6</th>
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<tbody>
<tr>
<td>The importance of project schedules</td>
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<tr>
<td>Activity definition</td>
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<td>Activity sequencing</td>
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<td>Activity resource estimating</td>
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<td>Activity duration estimating</td>
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<tr>
<td>Schedule development</td>
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<td>Schedule control</td>
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<tr>
<td>Using software to assist in project time management</td>
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</tbody>
</table>
Week 4 Outcomes: You will be able to …

- Discuss the importance of project schedules
- Describe and carry out the processes of:
  - activity definition,
  - activity sequencing,
  - activity resource estimating, and
  - activity duration estimating
- Describe and use different types of network diagrams
- Develop Gantt charts
- Describe and use:
  - Critical path analysis
  - Critical chain scheduling and
  - PERT
- Discuss how to control the schedule
- Describe how software can assist in project time management

Week 5: Project Quality Management

- Quality management
- Quality planning
- Quality assurance
- Quality control
- Tools and techniques for quality control
- Modern quality management
- Improving IT project quality
- Using software to assist in project quality management

Schwalbe Ch 8
### Week 5 Outcomes: You will be able to …

- Define and describe quality management
- Discuss quality planning
- Discuss quality assurance
- Describe various tools and techniques for quality control
- Describe various theories, tools and techniques of modern quality management
- Describe various ways of to improve IT/IS project quality
- Describe how software can assist in project quality management

### Week 6: Project Human Resource Management

- Human Resource Management
- Keys to managing people
- Human resource planning
- Acquiring the project team
- Developing the project team
- Managing the project team
- Using software to assist in human resource management

Schwalbe Ch 9

### Week 6 Outcomes: You will be able to …

- Discuss the importance of project human resource management
- Describe what is meant by project human resource management
- Describe key theories for managing people
- Describe and use different methods of resource planning
- Describe how best to assign resources to activities
- Describe various techniques for developing the project team
- Describe how best to manage the project team
- Describe how software can assist in project HR management

### Week 7: Project Communications Management

- Communications management
- Communications planning
- Information distribution
- Performance reporting
- Managing stakeholders
- Improving project communications
- Using software to assist in project communications management

Schwalbe Ch 10
### Week 7 Outcomes: You will be able to …

- Discuss the importance of communications management
- Discuss communications planning
- Describe methods of information distribution and their appropriateness
- Describe performance reporting
- Discuss how best to manage stakeholders
- Describe how communications within a project can be improved
- Describe how software can assist in project communications management

### Week 8: Project Risk Management

- Risk management
- Risk management planning
- Common sources of risk
- Risk identification
- Qualitative risk analysis
- Quantitative risk analysis
- Risk response planning
- Risk monitoring and control
- Using software to assist in project risk management

### Week 8 Outcomes: You will be able to …

- Discuss the importance of risk management
- Describe risk management planning
- Discuss common sources of risks on IS projects and how to identify risks
- Describe and use common qualitative and quantitative risk analysis techniques
- Discuss risk response planning
- Discuss risk monitoring and control
- Describe how software can assist in project risk management

### Week 9: Project Audit and Closure

- Project audits
- The project audit process
- Project closure
- Team evaluations

### Week 9 Outcomes: You will be able to …

- Describe project audits
- Discuss the project audit process
- Discuss the reasons for, and types of, project closure
- Discuss the purpose of evaluations for team members
- Describe how to conduct evaluations

### Week 10: Workshop - CPM and Risk Management

- CPM Exercise
- Risk Management Exercise

Schwalbe Chs 6 & 11

Review in advance of session

### Week 10 Outcomes: You will be able to …

- Use CPM to plan a project and to take remedial action if necessary
- Have an understanding of how to identify and manage potential risks to a project’s success

### Week 11: Workshop - Team Building

Schwalbe Ch 9

Review in advance of session

### Week 11 Outcomes: You will be able to …

- Understand the importance of team building
- To recognise and understand how to build a successful team

### Week 12: Guest Lecturer

A professional project manager from an multinational company will present to the class, describing the realities of Project Management in Agile Development

David Murray
Lumension Security Ireland Ltd

### Week 12 Outcomes: You will be able to …

- Describe the day to day realities of project management
- Discuss how the theory learnt in class is used within organisations
Lecture Schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture</th>
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Other Information:

Reading assignments are indicated above and are to be completed in advance of lectures. Additional reading assignments may be given during the semester.

There are two group-based Project Management assignments worth 40% of the overall grade for the course. To be eligible for marks, and unless specified differently by the lecturer, this assignment is to be completed in the student group’s own time and submitted directly to the lecturer by the date indicated. The assignments will be distributed in week 2 with a deliverable date of weeks 6 and 11.

Failure to submit a completed assignment at the indicated time will result in a forfeit of that assignment’s marks. There is no facility to resubmit an assignment(s) should a group a) fail to submit it on time, and/or b) submit but wish to withdraw the assignment solution in favour of an alternative solution.

General:

This course outline is available on blackboard.