MAYNOOTH UNIVERSITY
INTERNATIONAL
ENGINEERING & COMPUTER
SCIENCE
SUMMER SCHOOL
SYLLABI FOR 2019 CLASSES

**PLEASE NOTE THAT ALL
SYLLABI MAY BE SUBJECT TO
CHANGE FOR 2020**
Electric Circuits
EE215
5 ECTS Credits
<table>
<thead>
<tr>
<th>Module Name</th>
<th>Electric Circuits 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Code</td>
<td>EE215</td>
</tr>
<tr>
<td>Module Co-ordinator</td>
<td>Refer to Excel document <em>Module_Co-ordinators</em></td>
</tr>
<tr>
<td>Department</td>
<td>Electronic Engineering</td>
</tr>
<tr>
<td>Module Level</td>
<td>2</td>
</tr>
<tr>
<td>Credit rating</td>
<td>5 ECTS credits</td>
</tr>
<tr>
<td>Pre-requisites</td>
<td>None</td>
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</table>

**Aims**
To provide an in-depth knowledge of RLC circuits and filter design.

**Learning Outcomes**
At the end of the course, the student should be able to:

1. Explain conceptually what resonance and bandwidth mean in the context of RLC networks.
2. List and draw the frequency specifications of the four basic types of filters.
3. Draw a bode plot of a network function.
4. Design and build a passive filter based on a Butterworth response.
5. Use RLC circuits to modulate bandwidth and resonance as needed.
6. Use Matlab to analyse signals with the appropriate filter hardware.
7. Design, build and analyse a filter circuit in a lab environment.

**Time Allowance for Constituent Elements**

<table>
<thead>
<tr>
<th>Element</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>24</td>
</tr>
<tr>
<td>Tutorials</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Laboratory and exam</td>
<td>21 hours</td>
</tr>
<tr>
<td>Class Test</td>
<td>2 hours</td>
</tr>
<tr>
<td>Independent study</td>
<td>66 hours</td>
</tr>
<tr>
<td>Semester Examination</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

**Indicative Syllabus**

- RLC resonance, bandwidth and Q-factor
- Passive filter design – Low Pass, High Pass, Band stop and band pass filters
- RLC filter effects stage, Butterworth filters
- Bode plots
- Realisation of various filter specifications
- Stability of filter circuits
- Oscillators
- ADC and DAC circuitry

**Assessment Criteria**

<table>
<thead>
<tr>
<th>Assessment Criteria</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Examination</td>
<td>60%</td>
</tr>
<tr>
<td>Laboratory (6)</td>
<td>15%</td>
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<tr>
<td>Laboratory Exam (1)</td>
<td>15%</td>
</tr>
<tr>
<td>Class Test (2)</td>
<td>10%</td>
</tr>
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</table>

**Penalties:** Missed labs and class test cannot be repeated, in general.

**Pass Standard and any Special Requirements for Passing Modules:** The Pass Mark is 40% - students are not required to pass the written and continuous components separately.
**Supplemental Examination:** 1 x 2 hour written examination (Autumn). The continuous assessment mark is carried forward as there is no facility for repeating the continuous assessment elements of the course.

**Assessment Philosophy**

The class tests and examination paper are designed to cover learning outcomes 1-5. All questions in the class test are compulsory, while the final examination paper has a compulsory question that covers all aspects of the syllabus. The lab sessions cover learning outcomes 5-7 and encourage teamwork.

It should be noted that the laboratory exam will be individually assessed in the form a different problem given to each student.

**Course Text**

“Electromagnetics with Applications”, Kraus and Fleisch, McGraw-Hill

**References**

- “Engineering Electromagnetics”, Hayt and Buck, McGraw-Hill
- “Electromagnetic Fields and Waves”, Lorrain and Carson, Freeman

**Programmes currently utilising module**

<table>
<thead>
<tr>
<th>Programme</th>
<th>Compulsory</th>
</tr>
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<tbody>
<tr>
<td>BE in Electronic Engineering</td>
<td>Yes</td>
</tr>
<tr>
<td>BSc in Science (Engineering Science)</td>
<td>Yes</td>
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</tbody>
</table>
Introduction to Programming (Python)
EE115
5 ECTS Credits
<table>
<thead>
<tr>
<th><strong>Module Name</strong></th>
<th>Introduction to Programming [Python]</th>
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<tbody>
<tr>
<td><strong>Module Code</strong></td>
<td>EE115</td>
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<tr>
<td><strong>Module Co-ordinator</strong></td>
<td>Refer to Excel document <em>Module_Co-ordinators</em></td>
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<td><strong>Department</strong></td>
<td>Electronic Engineering</td>
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<tr>
<td><strong>Credit rating</strong></td>
<td>5 ECTS Credits</td>
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<td><strong>Pre-requisites</strong></td>
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**Aims**

The main aim of this module is to introduce basic problem solving techniques, approaches to planning and organizing computer programs, and the common computer programming language elements used to express the task to be performed when implementing a computer program.

**Learning Outcomes**

At the end of the course, the student should be able to:

1. Design, write and explain simple computer programs.
2. Communicate algorithms effectively using comments and appropriate naming of identifiers.
3. Use literal values, constants, and variables.
4. Make use of Boolean expression appropriately.
5. Use selection and iteration appropriately.
6. Define and use functions appropriately.
7. Make use of libraries (Python “modules”).
8. Use basic file input/output functions.

**Time Allowance for Constituent Elements**

<table>
<thead>
<tr>
<th>Element</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>21</td>
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<tr>
<td>Assignments (10 x 6 hr, including 10 x 3hr lab sessions)</td>
<td>60</td>
</tr>
<tr>
<td>Laboratory exams (2 x 3 hr)</td>
<td>6</td>
</tr>
<tr>
<td>Tutorials (8 x 1 hr)</td>
<td>8</td>
</tr>
<tr>
<td>Independent study</td>
<td>28</td>
</tr>
</tbody>
</table>
Indicative Syllabus

- How to launch python and write python scripts
- Programming fundamentals: variables, types, expressions and assignment
- Creating and printing text to output window
- Creating variable names of various types and assigning values
- Reading in user data
- Converting between types
- Simple mathematical operations using integers and floats; programming with complex numbers
- Basic comparisons using different types
- Boolean operations
- Loops, “if” and “else” statements
- Formatting programs: indentation and comments
- Creating and using lists
- Making use of list indices, lengths, changing list items and extending lists
- Using list methods including creating and testing lists and removing from lists
- Using list iterators; Using lists inside loops; Making use of list “slices”
- Reading from and writing to files
- Writing and using functions
- Using “tuples”
- Understanding “modules” (libraries)
- Finding and making use of system modules and external modules
- Python “dictionaries”
- Gentle introduction to classes and inheritance

Assessment Criteria

<table>
<thead>
<tr>
<th>Assessment Component</th>
<th>Percentage</th>
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<tr>
<td>Semester Examination</td>
<td>50%</td>
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<tr>
<td>Assignments (10)</td>
<td>20%</td>
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<tr>
<td>Lab exams</td>
<td>30%</td>
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</table>

Penalties: Class and laboratory tests cannot, in general, be repeated.

Pass Standard and any Special Requirements for Passing Modules: In order to pass this module, students must achieve an overall mark of at least 40%. Students are not required to pass the written and continuous components separately.
**Supplemental Examination:** 1 x 2 hour written examination (Autumn). The continuous assessment mark is carried forward as there is no facility for repeating the continuous assessment elements of the course.

**Continual Assessment Results:** All coursework elements will be corrected within two weeks, where that does not extend past the end of the semester. Results and corrected scripts will be available for viewing upon request.

**Assessment Philosophy**

This course is aimed at those that are entirely new to programming and provides an introduction to programming using Python. By the end of this course, students should be able to write simple Python programs and to interpret more complex Python programs written by others. This course is intended as a gentle introduction to the basic fundamentals of programming with minimal emphasis on setting up the programming environment. The course is designed as a simple lead-in to 1st years EE108 that deals with embedded C and 2nd years EE208 module, which deals with object oriented programming using C++ and employs more rigorous debugging tools. The assignments, lab exams, and semester examination all cover all learning outcomes.

**Course Text**


**References**

The official Python documentation can be found on-line at:  

http://docs.python.org/

**Programmes currently utilising module**

<table>
<thead>
<tr>
<th>Programme</th>
<th>Compulsory</th>
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<tbody>
<tr>
<td>BE in Electronic Engineering</td>
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</table>
Robotics Systems Project
EE198
5 ECTS Credits
### Aims
- To introduce project based learning.
- To introduce students to structured engineering design.
- To instill the creative spirit in students.
- To develop oral and written communication skills
- To develop students experience of working in a group
- To engender an awareness of ethical and health & safety issues in engineering

### Learning Outcomes
At the end of this module a student should be able to:

1. Apply project-based learning to solve unforeseen problems.
2. Apply structured design to a range of problems.
3. Apply theoretical knowledge in solving problems encountered.
4. Discuss any ethical issues, environmental impacts and health and safety issues associated with their project.
5. Write a technical report.
6. Prepare and deliver an oral presentation.
7. Defend their work through interview.
8. Demonstrate appropriate management techniques in the execution of their project (including time management and project planning)
### Time Allowance for Constituent Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Workshops</td>
<td>15</td>
</tr>
<tr>
<td>Independent study (including meetings, reporting, etc.)</td>
<td>172</td>
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</table>

### Workshop Content

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Content</th>
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</thead>
<tbody>
<tr>
<td>Workshop 1</td>
<td>Project &amp; Group work</td>
</tr>
<tr>
<td>Workshop 2</td>
<td>Engineering design fundamentals, basic project planning &amp; Engineering ethics</td>
</tr>
<tr>
<td>Workshop 3</td>
<td>Reflection journal writing/video log</td>
</tr>
<tr>
<td>Workshop 4</td>
<td>Technical report writing</td>
</tr>
<tr>
<td>Workshop 5</td>
<td>Presentation skills</td>
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### Assessment Criteria

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interim Report + Group presentation/interview</td>
<td>15%</td>
</tr>
<tr>
<td>Final Report + Video Log + Group presentation/interview *</td>
<td>70%</td>
</tr>
<tr>
<td>Presentations (Interim and Final)</td>
<td>15%</td>
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</table>

*One report is submitted per group. However, each member of the group will be graded based on the group report and presentation/interview.

**Penalties:** Late submission of reports will be subject to a penalty of 10% of the assessment grade for each day (or part thereof) overdue.
**Pass Standard and any Special Requirements for Passing Modules:** Pass 40% - students are not required to pass the assessment components separately – an overall pass mark of 40% is acceptable.

**Supplemental Examination:** This module is 100% continually assessed. Hence, there is no repeat Autumn examination, as there is no facility available for repeating the continuous assessment elements of the module. However, students who obtain between 30 – 40% are eligible for supplemental assessment over the summer period. In such instances, the final module grade will be capped at 40%.

### Assessment Philosophy

The different modes of assessment employed (reports, presentation and interviews) evaluate learning outcomes 5 – 7. Learning outcomes 1 – 4 are primarily evaluated in the final report and interview. The number and scheduling of the assessment procedures are designed to indirectly evaluate learning outcome 8. Direct assessment of learning outcome 8 also occurs in the interim report through the requirement for a project completion plan and Gantt chart.

### Programmes currently utilising module

BSc in Robotics and Intelligent Devices
Digital Systems 1
EE103
5 ECTS Credits
| **Module Name** | Digital Systems 1  
EE103 |
|-----------------|----------------------------------|
| **Module Code** | Refer to Excel document *Module Co-ordinators*  
Electronic Engineering |
| **Credit rating** | 5 ECTS Credits |
| **Pre-requisites** | None |

**Aims**
- To introduce students to the world of digital design.
- To equip students with the necessary skills to tackle real-world problems in the design of complex digital systems.

**Learning Outcomes**
At the end of this module, the student will be able to:

1. Conduct basic arithmetic with binary numbers.
2. Perform Boolean algebra.
4. Implement a logic circuit using only NAND / NOR gates.
5. Describe the operation of basic flip-flops.
6. Design a synchronous counter.
7. Distinguish between different programmable logic devices.

**Time Allowance for Constituent Elements**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>Lectures / Tutorials</td>
<td>34</td>
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<tr>
<td>Class tests (2 x 1 hr)</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory (4 x 3 hr)</td>
<td>12</td>
</tr>
<tr>
<td>Independent study</td>
<td>75</td>
</tr>
<tr>
<td>Semester examination</td>
<td>2</td>
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</table>
Indicative Syllabus

- Binary numbers – the currency of computers
- Binary representations – sign and magnitude, two’s complement, BCD
- Binary arithmetic – addition, subtraction, multiplication
- Boolean functions and Boolean minimisation
- Minimisation using Karnaugh maps (up to and including 5-variables)
- Implementation using NAND and NOR functions
- Sequential Logic – SR, D, JK, T and Master-slave flipflops
- Counters
- Registers
- Programmable Logic Devices
  - Programmable Array Logic (PAL)
  - Programmable Logic Arrays (PLA)
  - Read Only Memory (ROM)

Assessment Criteria

<table>
<thead>
<tr>
<th>Assessment Item</th>
<th>Percentage</th>
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<tr>
<td>Semester examination</td>
<td>70%</td>
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<tr>
<td>Laboratory reports (4)</td>
<td>10%</td>
</tr>
<tr>
<td>Class tests (2)</td>
<td>20%</td>
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</table>

Penalties: Missed labs and class tests cannot be repeated, in general.

Pass Standard and any Special Requirements for Passing Modules: The Pass Mark is 40% - students are not required to pass the written and continuous components separately.

Supplemental Examination: 1 x 2 hour written examination (Autumn). The continuous assessment mark is carried forward as there is no facility for repeating the continuous assessment elements of the course.

Assessment Philosophy

The final examination and class tests are designed to assess all learning outcomes. All questions in all class tests are compulsory, while the examination paper has a compulsory question that covers all aspects of the syllabus. The laboratory covers learning outcomes 3 - 7 and also encourages teamwork.
<table>
<thead>
<tr>
<th>Course Text</th>
<th>References</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Programmes currently utilising module</th>
<th>Compulsory</th>
</tr>
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<tbody>
<tr>
<td>BE in Electronic Engineering</td>
<td>Yes</td>
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<tr>
<td>BSc in Robotics and Intelligent Devices</td>
<td>Yes</td>
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Digital Systems 2
EE209
5 ECTS Credits
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<td>Electronic Engineering</td>
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<tr>
<td><strong>Credit rating</strong></td>
<td>5 ETCS credits</td>
</tr>
<tr>
<td><strong>Pre-requisites</strong></td>
<td>EE103 Digital Systems 1</td>
</tr>
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</table>

**Aims**

- To develop the students’ understanding of digital systems principals and design methods.

**Learning Outcomes**

At the end of this module a student should be able to:

1. Perform calculations using different number systems.
2. Distinguish between different error control codes.
3. Design combinational logic circuits using multiplexers as universal logic modules.
4. Analyse and design Finite State Machines.
5. Outline the key features of memory and storage devices (RAM, ROM etc.).
6. Explain the basic operation of Analogue to Digital and Digital to Analogue converters.
7. Outline the difference between CPUs and FPGAs.
8. Explain the function of both CPUs and FPGAs.

**Time Allowance for Constituent Elements**

<table>
<thead>
<tr>
<th>Element</th>
<th>Time allowance</th>
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<tbody>
<tr>
<td>Lectures</td>
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<tr>
<td>Tutorials</td>
<td>11 hours</td>
</tr>
<tr>
<td>Class test</td>
<td>1 hour</td>
</tr>
<tr>
<td>Laboratory (5 x 3hr)</td>
<td>15 hours</td>
</tr>
<tr>
<td>Independent study</td>
<td>72 hours</td>
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</tbody>
</table>
### Indicative Syllabus

- Error control codes
- Combinational logic with MSI and LSI
- Sequential logic design - Flip-flops.
- Programmable logic
- Finite state machines (Mealy and Moore machines); Analysis. Design of minimal equivalent machines through state reduction. Analysis of invalid states.
- Memory (ROM and RAM) and storage devices. SRAM and DRAM timing.
- Multiplexers. Combinational logic design using Multiplexers as Universal Logic Modules
- Introduction to FPGA technology - RTL level, comparison with Embedded processors/CPUs

### Assessment Criteria

<table>
<thead>
<tr>
<th>Assessment Component</th>
<th>Marks</th>
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<tbody>
<tr>
<td>Semester examination</td>
<td>70%</td>
</tr>
<tr>
<td>Laboratory (5)</td>
<td>20%</td>
</tr>
<tr>
<td>Class test</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Penalties:** Missed labs and class tests cannot be repeated, in general.

**Pass Standard and any Special Requirements for Passing Modules:** Pass 40% - students are not required to pass the written and continuous components separately – an overall pass mark of 40% is acceptable

**Supplemental Examination:** 1 x 2 hour written examination (Autumn). The continuous assessment mark is carried forward as there is no facility for repeating the continuous assessment elements of the course.
The final examination and the class test are designed to assess all learning outcomes 1 – 8. All questions in the class test are compulsory. The laboratories cover learning outcomes 2 – 4 and also encourage teamwork.

**Course Text**

**References**

<table>
<thead>
<tr>
<th>Programmes currently utilising module</th>
<th>Compulsory</th>
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<tbody>
<tr>
<td>BE in Electronic Engineering</td>
<td>Yes</td>
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</table>
Analogue Electronics & Business Project (Problem Based Learning)
EE229
10 ECTS Credits
## Module Name
Analogue Electronics and Business Project (Problem Based Learning)

## Module Code
EE299

## Module Co-ordinator
Refer to Excel document Module_Co-ordinators

## Department
Electronic Engineering

## Credit rating
10 ECTS credits

## Pre-requisites
EE199 Systems and Control Project (PBL)

### Aims
- To promote project based learning in the field of analogue electronics.
- To instill the creative spirit in students.
- To develop oral and written communication skills.
- To develop students experience of working in a group.
- To engender an awareness of ethical issues in engineering.
- To develop a basic business proposal.

### Learning Outcomes
At the end of this module a student should be able to:

1. Apply problem-based learning to solve unforeseen problems in the area of analogue electronics.
2. Apply structured design to a range of problems.
3. Apply theoretical knowledge in solving problems encountered.
4. Apply a structured process to business proposal research, including market research, user research and competitor analysis.
5. Prepare a set of manufacturing documentation (costed BOMs, Assembly and Test specifications).
6. Discuss any ethical issues, environmental impacts and health and safety issues associated with their project.
7. Write a product concept report (including technical and business feasibility issues) and prepare and deliver an oral presentation.
8. Defend their work through interview.
9. Demonstrate appropriate project management techniques (including time management and project planning).

### Workshop Content
Workshop 1 – Problem-based learning – revision & reflection
Workshop 2 – Project Planning
Workshop 3 – New product development – market and user research
Workshop 4 – The new product business proposal

<table>
<thead>
<tr>
<th>Assessment Criteria</th>
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<tbody>
<tr>
<td>Business Proposal – Report and Interview*</td>
<td>20%</td>
</tr>
<tr>
<td>Final Report + Interview*</td>
<td></td>
</tr>
<tr>
<td>*Presentation/Structure/Communication (15%)</td>
<td></td>
</tr>
<tr>
<td>*Understanding of problem domain (25%)</td>
<td></td>
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<tr>
<td>*Technical content – quantity and depth (50%)</td>
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<tr>
<td>*Ethical considerations (10%)</td>
<td>60%</td>
</tr>
<tr>
<td>Final Presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Project Management Report (including reflective journals and an account of project execution)*</td>
<td>10%</td>
</tr>
</tbody>
</table>

*One report is submitted per group. However, each member of the group will be graded individually. Their grade will be based on the group report and presentation, their individual contribution to the project and, significantly, their knowledge of the overall project, as determined by the interview.

**Penalties:** Late submission of reports will be subject to a penalty of 10% of the assessment grade for each day (or part thereof) overdue.

**Pass Standard and any Special Requirements for Passing Modules:** Pass 40% - students are not required to pass components separately – an overall pass mark of 40% is acceptable.
Supplemental Examination: This module is 100% continually assessed. Hence, there is no repeat Autumn examination, as there is no facility available for repeating the continuous assessment elements of the module.

Assessment Philosophy

The different modes of assessment employed (reports, presentation and interviews) evaluate learning outcomes 7 and 8. Learning outcomes 1 – 6 are primarily evaluated in the main report and interview.

The number and scheduling of the assessment procedures are designed to indirectly evaluate learning outcome 9. Direct assessment of learning outcome 9 also occurs in the project management report through the requirement for a project completion plan.

Programmes currently utilising module

<table>
<thead>
<tr>
<th>Programme</th>
<th>Compulsory</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE in Electronic Engineering</td>
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</table>
Analogue Electronics & Business Project
(Problem Based Learning)
EE229
10 ECTS Credits
<table>
<thead>
<tr>
<th>Module Name</th>
<th>Analogue Electronics and Business Project (Problem Based Learning)</th>
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<tr>
<td>Module Code</td>
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<td>Electronic Engineering</td>
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<tr>
<td>Credit rating</td>
<td>10 ECTS credits</td>
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<tr>
<td>Pre-requisites</td>
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</table>

**Aims**

- To promote project based learning in the field of analogue electronics.
- To instill the creative spirit in students.
- To develop oral and written communication skills.
- To develop students experience of working in a group.
- To engender an awareness of ethical issues in engineering.
- To develop a basic business proposal.

**Learning Outcomes**

At the end of this module a student should be able to:

10. Apply problem-based learning to solve unforeseen problems in the area of analogue electronics.
11. Apply structured design to a range of problems.
12. Apply theoretical knowledge in solving problems encountered.
13. Apply a structured process to business proposal research, including market research, user research and competitor analysis.
14. Prepare a set of manufacturing documentation (costed BOMs, Assembly and Test specifications).
15. Discuss any ethical issues, environmental impacts and health and safety issues associated with their project.
16. Write a product concept report (including technical and business feasibility issues) and prepare and deliver an oral presentation.
17. Defend their work through interview.
18. Demonstrate appropriate project management techniques (including time management and project planning).

**Time Allowance for Constituent Elements**

| Workshops | 12 hours |
### Independent study (including meetings, reporting, etc.)

238 hours

### Workshop Content

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Content</th>
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</thead>
<tbody>
<tr>
<td>Workshop 1</td>
<td>Problem-based learning – revision &amp; reflection</td>
</tr>
<tr>
<td>Workshop 2</td>
<td>Project Planning</td>
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<tr>
<td>Workshop 3</td>
<td>New product development – market and user research</td>
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<tr>
<td>Workshop 4</td>
<td>The new product business proposal</td>
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</table>

### Assessment Criteria

<table>
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<tr>
<th>Assessment Category</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Business Proposal – Report and Interview*</td>
<td>20%</td>
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<tr>
<td>Final Report + Interview*</td>
<td></td>
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<tr>
<td><em>Presentation/Structure/Communication (15%)</em></td>
<td></td>
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<tr>
<td><em>Understanding of problem domain (25%)</em></td>
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<tr>
<td><em>Technical content – quantity and depth (50%)</em></td>
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<tr>
<td><em>Ethical considerations (10%)</em></td>
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<tr>
<td>Final Presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Project Management Report (including reflective journals and an account of project execution)*</td>
<td>10%</td>
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</table>

*One report is submitted per group. However, each member of the group will be graded individually. Their grade will be based on the group report and presentation, their individual contribution to the project and, significantly, their knowledge of the overall project, as determined by the interview.*

**Penalties:** Late submission of reports will be subject to a penalty of 10% of the assessment grade for each day (or part thereof) overdue.
**Pass Standard and any Special Requirements for Passing Modules:** Pass 40% - students are not required to pass components separately – an overall pass mark of 40% is acceptable.

**Supplemental Examination:** This module is 100% continually assessed. Hence, there is no repeat Autumn examination, as there is no facility available for repeating the continuous assessment elements of the module.

**Assessment Philosophy**

The different modes of assessment employed (reports, presentation and interviews) evaluate learning outcomes 7 and 8. Learning outcomes 1 – 6 are primarily evaluated in the main report and interview.

The number and scheduling of the assessment procedures are designed to indirectly evaluate learning outcome 9. Direct assessment of learning outcome 9 also occurs in the project management report through the requirement for a project completion plan.

<table>
<thead>
<tr>
<th>Programmes currently utilising module</th>
<th>Compulsory</th>
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<tbody>
<tr>
<td>BE in Electronic Engineering</td>
<td>No</td>
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Introduction to the Anthropology of Ireland
Anthropology
AN303
5 ECTS Credits

AN303SS: Special Topics: Area Studies: The Anthropology of Ireland

Maynooth University Department of Anthropology
What is Ireland? What is Irishness? This seminar series will consider the multiple dimensions of Ireland and Irishness. In the popular imaginary, Ireland continues to conjure up images of a timeless, mystical landscape, and simple, chronically alcoholic folk (and Enya). Ireland has had to contend with this image for centuries, yet its culture and people have been constantly shaped and defined by global forces, from initial contacts with continental invaders, to English colonisation, and contemporary stereotypes. Anthropology has played a role in this complex politics of representation, often eliding the reality of life here.

Students will also explore the development of cultural anthropology on both sides of the Atlantic, and encounter important concepts and theories that will enable them to think critically about Ireland, Irishness, and questions of identity, tradition, community, nationalism, and race. This seminar aims to look beyond representation and stereotypes, and explore Ireland’s economic, social, and cultural challenges, and how its present and future look in the twenty-first century. We will look at how Ireland’s present-day multiplicity intersects with the traditional image of rural, monocultural, and Catholic, examining recent trends such as multiculturalism and GLBT+ activism. We will explore manifestations of Irish culture such as contemporary drag performance, seeing how Irish tradition is reproduced, reformulated, and what meaning such practices hold for practitioners and spectators. Ireland has multiple and often conflicting identities, most obviously with Northern Ireland. We will look at the outline of division there, but also how gendered and class divisions shape these dynamics in the North and elsewhere.

Learning Outcomes: • Students will have been introduced to the development of anthropology in Ireland and its main themes that continue to be of concern. • Students will be familiar with shifting ethnographic approaches and methods to the study of communities, notions of tradition, and distinct shades of nationalism. • Through a variety of case studies, students will understand functionalism,
Topic One: Introducing Anthropology, Ireland, and thinking about identity

In our first seminar, we will introduce ourselves, discuss our diverse backgrounds, and why we are all here discussing Ireland and anthropology. We will then think critically about identity itself, using critical theoretical tools, and some (light) group work. We will also discuss the origins of anthropology, encounters with difference, and become familiar with some key markers of the discipline.

In our second seminar, we will think about Ireland, and how the country and its people have been framed as the ‘other’ in both colonial and anthropological discourses. We will also consider the contemporary valence of certain notorious stereotypes about the Irish (looking at a selection in class). Anthropological theories of stereotypy will also be discussed, in order to help us think critically about the enduring appeal of certain inaccurate caricatures. Students will also view the classic work of ethnofiction, Robert O’Flaherty’s Man of Aran (1934) in class.

Topic Two: Political Anthropology: Race and Nationalism, Historical and Contemporary

In seminar one, we will consider the issue of race, both in the construction of the figure of ‘the Irish’ in colonial, anthropological, and international sociocultural discourses, but also consider the political currency of the ‘white slaves’ myth in contemporary public discourse. There will also be an examination of how anthropologists have engaged with questions of racial difference over time.

In seminar two, we will think about the political ideology of nationalism, through an anthropological lens, but also with specific reference of Irish identity. How has Irishness been shaped by this nineteenth century movement? Did Irish identity exist before nationalism? Can you be Irish if you were not born here, or your parents were not born here? Can you be Irish if you are born here? Can
you be Irish if other Irish people can’t pronounce your name? We will consider these questions and more.

**Topic Three: Field Trip to Kilmainham Gaol**

In our second meeting this week, and following on from our trip to Kilmainham Gaol, we will consider the culture of Ireland in the twentieth century, a place struggling to define itself against its former occupier, as an independent, Catholic state. We will think about how anthropologists recorded a shifting Irish culture over the decades, as well as reflect upon the sectarian violence that erupted in Northern Ireland in the 1960s. In addition to issues of religion and colonialism, we will also pay attention to questions of gender and class in the conflict.

**Topic Four: Dragging* Ireland into Modernity**

In our first meeting, we will engage with anthropological theories of memory and historical remembrance in relation to national trauma. We will pay specific attention to Ireland’s history of institutionalisation, and how this dark period of our collective past is being recovered, reckoned with, remembered, and shapes Ireland’s political present.

In our final seminar, we will consider Ireland’s (relatively) recent embrace of same-sex marriage, as well as liberalisation of reproductive rights. We will consider – using critical theory – Ireland’s adoption of a progressive attitude towards GLBT issues, amid a turn towards a social conservatism across the globe, and what it means for Irish identity. To illuminate Ireland’s recent social history, we will critically analyse *The Queen of Ireland* (2015), a documentary portrait of Panti Bliss, a drag queen who has become the accidental face of the marriage movement in Ireland ahead of the 2015 referendum.

*see what I did there?
Readings will be available on Moodle and in the Maynooth University Library (online and offline)

The module will be evaluated through a 2000 word paper, due at the end of the module. Details will be available on Moodle.

ENDS
Public Speaking & Communications
English
EN 010
7.5 ECTS Credits
Course Outline:

This course is designed to introduce students to the basic elements of communication, to provide practical experience in the preparation and delivery of public presentations, while also delivering key critical listening skills. Businesses expect university graduates to be able to deliver a high level of written and oral communication. In fact, communications skills are amongst some of the highest rated skills expected of Irish graduates in the Irish business community. Businesses and other organizations rely on successful communications to be able to operate successfully in a challenging local and global market. We hope to improve the students’ communications skills and give them the confidence they need to succeed in college presentations as well as in their future professional endeavours.

Primary text:


Preliminary Reading

Students should prepare for the course by attaining a copy of the core text (Amazon.co.uk 35-40 Euro). Weekly readings will develop from this text. A Moodle page will also provide other resources including videos and readings. Students will have access to this page prior to and during their time at DBS.

Course Objectives

The course objectives include:

1. To relate the principles of public speaking to a variety of extemporaneous speech situations.
2. To develop skill in researching a topic for a speech.
3. To prepare and organize the content for speech in an outline.
4. To improve the use of language in conveying messages.
5. To develop critical analysis while listening to speeches.
6. To deliver appropriate speeches with increased confidence and skill.

Assessment

Assessment will be by way of four formally graded speeches and one in-class test. Each aspect (1 test, 4 speeches) is worth 20% each. There will be other un-marked assignments during the
term including peer assessment. A typed outline will also be submitted with each speech. Full guidelines for each will be given on Moodle and in class.

Speeches:
1. Informative/Demonstrative speech: 4-6 minutes
2. Informative Speech (definition or description, research required): 4-6 minutes.
4. Persuasive Speech (conviction/actuation, research required): 7-10 minutes.

Summary of Course Structure

Week 1: Introductions/ General overview to Public Speaking and Communications/ Short ‘get to know each other’ speech
Speaking in public: why and how/ History of public speaking/ Nerves and building confidence/ Ethics
Listening skills/ How to analyse an audience/ Adapting to audience feedback and the feedback loop/ Speech 1 due

Week 2: Prepare, Prepare, Prepare/ How to develop your speech/ Research and how to use it for support
Organizing your speech/ Introductions/ Conclusions
Effective outlining/ Preparation outlines/ delivery outlines/ Speech 2

Week 3: A visit and guided tour to the old Parliament of Ireland building (Bank of Ireland) and a guided tour of Leinster House
Revising/ Using English effectively
How to effectively deliver your speech/ Body language/ Verbal and nonverbal communications skills/ Speech 3

Week 4: Adapting and delivering/ Effective usage of presentation aids
Types of speeches overview/ Informative speaking explored
Principles of persuasive speaking/ Persuasive strategies
Speaking on special occasions/ Small and large group speaking/ Speech 4/ Final test

ENDS
Climate Change
Geography
GY 313
5 ECTS Credits
The module will mainly be delivered through lectures with one field trip focusing on public knowledge and perceptions of climate change.

The learning outcomes will be as follows:

Students will gain a detailed understanding of how the field of climate science originated.

Students will gain knowledge of how climate data is gathered, how the methods have changed over time, how the data is analysed and how historical climate scientists interpret this data to find trends in the climate.
Students will have an opportunity to engage with a data rescue project and see first hand how historical data is gathered and rescued.

Students will also explore public perceptions of climate change and learn how to gather data to answer key questions related to climate adaptation.

They will gain experience in the field. Students will be introduced to the concepts surrounding climate models and the many problems scientists face when modelling future climate.

Students will also have a chance to explore the many debates within climate change and put their own debating skills to the test.

Module structure:

Class 1, Historical climatology and origins of the field (Will include an introduction to citizen science and data rescue): this class will explore the key discoveries which helped to develop the field of climate science. It will show students how climate scientists collect data and why historical climatology is important. It will also teach students about data rescue and allow them to engage in projects.

Class 2, Evidence for Climate change: this class will explore the types of data that scientists use to evaluate trends in the climate. It will show students what evidence exists to confirm that the climate is changing.

Class 3, How does the Climate change? This class will focus on the physical processes that drive climate change.

Class 4, Perceptions of Climate Change and adaptation: This class will explore how people's perceptions of climate change form and how these perceptions influence adaptation to future climate change.
Class 5, Public knowledge and perceptions of climate change: this class will deal with the methods used to understand perceptions of climate change and how climate information can be communicate to the public. This will class will tie in with the theme of the field trip.

Class 6, What is dangerous about climate change? This class will explore the dangers of climate change such as heatwaves, floods and possible impacts on ecosystems and society if the world adopts a business as usual approach.

Class 7, How do we know about future climate change? This class will explore climate models and how we live with uncertainty and create robust adaptation strategies.

Class 8, The IPCC process and climate debates: This class will introduce students to the process used by the intergovernmental panel on climate change for producing their climate change reports. It will also explore some of the debates and political issues around the topic.

Assessment:
100% continuous assessment (60% essay/project, 30% field report, 10% in class contribution and additional exercises).

Field trip:
Students will be brought to the Cool Planet Experience climate exhibition in Powerscourt estate County Wicklow. This is an interactive exhibition that will show students how climate change information can be communicated to the public.

Students will also have the opportunity to design and implement a survey on the grounds to investigate public perceptions and knowledge of climate change before and after engaging with the exhibition.

The collected data will then be used to show students data analysis techniques and for class discussions.

This field trip will show students some of the methods used for collecting data. It will tie in with class 4 and 5 on public knowledge and perceptions of climate change and it will show students possible ways of effectively communicating climate information.

Additional exercises include:
1) Citizen science and data rescue project: students will get first hand experience engaging with a citizen science project cyclone center and data rescue of old weather records.

2) Presentation: students will get the opportunity to improve their presentation skills by delivering a short presentation related to their in-class data rescue work.

3) Climate services project: students will be presented with various climate change scenarios (eg: what impacts will farmers face from climate change in the future) and be asked to put their knowledge to the test and produce an action plan to inform the public of future risks.

4) Climate debates: students will have the opportunity to put their knowledge to the test and debate about various issues related to climate change.

5) Create surveys: students will gain skills in creating and implementing surveys to capture public perceptions of climate change.

Field report: following the field trip students will evaluate the data obtained and produce an 800 word report detailing what they discovered.

Project: students will produce a 2,500 word project related to one aspect of the course that they are interested in. This project could involve data rescue and it's importance or deal with communication of climate science to the public.

Reading list:

Wilby, R.L. Climate Change in Practice.

IPCC summary for policy makers.


ENDS
Ireland & the Great Famine
History
HY 273
5 ECTS Credits
Maynooth University International Summer School
Department of History

HY 273SS
The Great Irish Famine
July 2019
Module description

This module will introduce the student to the causes and consequences of the Great Irish Famine, when between 1845 and 1852 an estimated one million people died and a further one million migrated. While in terms of deaths the Great Irish Famine does not rank anywhere near a number of other such events – for example the Irish Famine, 1740-41, when approximately half-a-million of an estimated population of two-and-a-half million died, or the Great Bengal Famine, 1769-1773, which caused roughly 10 million deaths – it has remained a focus of popular memory and scholarly study.
While the immediate cause of the famine was the failure of the potato crop, this module will place this event within the broader social, economic, political and cultural context of nineteenth-century Ireland. In doing this, it seeks to understand the multiple factors that caused this disaster; the varied local, state and philanthropic responses to it; and its long-term impacts. Students will be introduced to the economic and theological concepts that guided contemporary reaction to the outbreak of the famine, as well as responses to it. Finally, students will gain an understanding of the contested nature of the historiography and remembrance of the famine.

To help attain this goal, students will study a range of secondary and primary sources, including: journals, newspapers, correspondence and eyewitness accounts.

**Learning outcomes**

i. Identify and understand the key causes and consequences of the Great Irish Famine

ii. Contextualise the changes in Irish society as a result of the famine

iii. Understand and analyse the broad range of primary and secondary source material which underpins the study of the Great Famine

iv. Interpret and understand a broad range of historiographical arguments relating to the famine.

v. Students will construct a researched, structured and persuasive essay on an aspect of the Great Irish Famine

vi. Students will develop skills in team work and group-research projects

vii. Students will develop their oral communication skills through seminars and a formal group presentation

**Readings**

Students are provided with an extensive reading list outlining the main reference, general and Famine-specific works by historians. All of these are available through the Maynooth University Library, either in hard copy or as online resources. To identify additional works pertaining to the Great Irish Famine, students are encouraged to consult Irish History Online (https://catalogues.ria.ie/Presto/home/home.aspx), a bibliography of Irish history, and the Library online catalogue (https://www.maynoothuniversity.ie/library).

**Moodle**

The course outline, lecture slides, reading list, course announcements and links to recommended websites will be posted on Moodle, the university’s online learning environment (moodle.nuim.ie).

**Email**

It is important that students check their Maynooth University email accounts regularly, all correspondence related to the module should be conducted through this.

**Attendance, preparation and participation**
To benefit fully from the course and to ensure participation with their assigned group, students should attend all lectures. **There is an attendance condition attached to this module. A student must attend a minimum of 50% of the module lectures. If this condition is not met the module result is capped at a maximum of 35%.**

Please note that it is expected that students are punctual for lectures. If you are late, please enter the lecture hall with the minimum of noise and disturbance. If you must leave early, please notify the lecturer in advance and sit where you will not disturb others upon leaving. Please ensure that you have signed in for class. Phones should not be used in class; laptops etc. should be used for class work only.

**Citation and plagiarism**

All submitted work should include footnotes and a bibliography based on Irish Historical Studies’ Rules for Contributors. An abbreviated version of this can be found in the history department’s Undergraduate Handbook. Online sources should be from a reputable repository and fully referenced. These are not a substitute to engagement with the historical arguments set out in the academic texts contained in the reading list. Students should also note the consequences of plagiarism as set in the Undergraduate Handbook, this can be viewed here:


All assignments must be accompanied by a fully completed cover sheet, which is available on Maynooth University Department of History website:


**Assessment**

Assignment 1: Review of secondary source (15%) 750-word review

Assignment 2: Analysis of primary sources (15%) 750 words

Assignment 3: Field-trip report (10%) 500 words

Assignment 4: Group presentation (30%). This will consist of a twenty-minute presentation based on a research topic chosen by the group. This topic should be agreed with the course lecturer and work on this will form a significant part of the module.

Assignment 5: Essay (30%) 1,500-word research essay.

**Lecture Schedule**

<table>
<thead>
<tr>
<th>Day 1 (8 July)</th>
<th>Morning</th>
<th>Afternoon</th>
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</table>
| 9.30am – 12.00pm | **Introduction**  
**Lecture 1: Historiography of the famine** | **Comparison of secondary sources**  
**Preparation assignment 1** |
| 1.00pm – 3.30pm | | |

<table>
<thead>
<tr>
<th>Day 2 (10 July)</th>
<th>Morning</th>
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</table>
| 9.30 – 12.00pm | **Lecture 2: Pre-famine Ireland**  
**Primary source analysis & discussion** |
<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
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</thead>
</table>
| 1.00pm–3.30pm | **Afternoon**  
Lecture 3: The coming of blight: the famine begins  
Primary source analysis & discussion  
Preparation assignment 2 |

**Day 3 (15 July)**
<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
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| Morning    | **Lecture 4:** Government response to famine, 1845–6  
**Lecture 5:** Government response, 1846–50 |
| Afternoon  | Preparation for group presentations  
[Assignment 1 due] |

**Day 4 (17 July)**
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<tr>
<th>Time</th>
<th>Activities</th>
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| Morning    | **Lecture 6:** Local and private relief efforts, 1845–51  
Primary source analysis & discussion |
| Afternoon  | **Lecture 7:** Landlord responses to famine  
Primary source analysis & discussion  
[Assignment 2 due] |

**Day 5 (22 July)**
<table>
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<tr>
<th>Time</th>
<th>Activities</th>
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<tr>
<td></td>
<td><strong>Field Trip to Epic: the Irish Emigration Museum</strong></td>
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**Day 6 (24 July)**
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<tr>
<th>Time</th>
<th>Activities</th>
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| Morning    | **Lecture 8:** Emigration  
Primary source analysis & discussion |
| Afternoon  | **Group presentations** |

**Day 7 (29 July)**
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<tr>
<th>Time</th>
<th>Activities</th>
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</table>
| Morning    | **Lecture 9:** Depictions of the famine in fiction, art & film etc.  
Source analysis & discussion |
| Afternoon  | **Film:** Black 47  
[Fieldtrip report due] |

**Day 8 (31 July)**
<table>
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<tr>
<th>Time</th>
<th>Activities</th>
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<tbody>
<tr>
<td>Morning</td>
<td><strong>Lecture 10:</strong> Ireland after the famine</td>
</tr>
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</table>
| Afternoon  | **Module overview & course conclusions**  
[Extended essay due] |

ENDS
The Cultural Heritage of Medieval Society

Nua Gaeilge

ID 202

7.5 ECTS Credits
MAYNOOTH UNIVERSITY INTERNATIONAL SUMMER SCHOOL
CENTRE FOR IRISH CULTURAL HERITAGE
ID202 THE CULTURAL HERITAGE OF MEDIEVAL SOCIETY

Contact Hours: 40+
Credits: 7.5 ECTS

**Course Aims**
Students will develop a broad understanding of early cultural heritage in the areas of archaeology, history and early Irish literature and assess this in the context of the presentation of heritage knowledge.

**Module Content**
This is a foundation course in Irish Cultural Heritage Studies. While introducing students to a general understanding of early cultural history, the emphasis is on the importance of academic knowledge of the past as a foundation for the presentation and dissemination of cultural heritage for both a scholarly audience and the general public. This is an assessment of the diverse and exciting aspects of Irish cultural history including archaeology, history, architecture and the arts, the literature of places and the creation and manipulation of history in relation to some of the great prehistoric and early medieval locations in Ireland. The care, presentation and future development of important heritage sites such as Emain Macha, the Hill of Tara, the Boyne Valley (Newgrange) and Clonmacnoise will be assessed in the context of modern scholarly interpretation and the increasing importance of cultural awareness.

**Field Seminars**
An essential part of the teaching in this module is on-site, at the great monuments and complexes that form the focus of study.
1. Laraghbryan medieval church
2. The Hill of Tara archaeological complex, Bective medieval abbey and Trim Castle
3. The monastic complex at Clonmacnoise and the Iron Age trackway at Corlea
4. Maynooth Castle

TEACHING AND LEARNING METHODS
This module involves a mixture of lectures, class seminars and independent study but there is a particular emphasis on Field Seminars where teaching takes place at the sites and monuments associated with early Irish cultural heritage.

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Friday</th>
<th>Other assignments</th>
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<tbody>
<tr>
<td>1</td>
<td>Orientation</td>
<td>Lectures Laraghbryan</td>
<td>Lectures</td>
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<tr>
<td>2</td>
<td>Lectures</td>
<td>Tara, Bective, Trim</td>
<td></td>
<td>Assignment 1: Independent Study Report (Wednesday)</td>
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<tr>
<td>3</td>
<td>Lectures</td>
<td>Lectures</td>
<td>Clonmacnoise, Corlea</td>
<td>Assignment 2: Site Report (Wednesday)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Maynooth Castle Lectures</td>
<td>Lectures Assignment workshop + presentations</td>
<td></td>
<td>Complete assignments: Assignment 3: Essay Wednesday</td>
<td></td>
</tr>
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1 See Assignment 1

Case Study 1: late prehistory and the ‘Royal Sites’

**Week 1: Introduction (archaeology, history and literature)**

Field Seminar 1: Laraghbryan medieval church

Preparation for Field Seminar 2: Hill of Tara, Bective Abbey, Trim Castle

The ‘Royal Sites’—so-called because of the identification in the early medieval period as the pre-Christian residences of provincial kings—have been the subject of intense recent archaeological investigation. This research has revealed a deep history of activity at each of these—Tara, Emain Macha (Navan Fort), Dún Ailinne (Knockaulin) and Cruachain—stretching back in some cases to the Neolithic period before 3000 BC. The principal era of intensive activity is in the Middle Iron Age La Tène period (c. 350–100BC) when impressive religious shrines and sanctuaries, regional ceremonial centres, were erected and maintained at each location. Around 100 BC these sites were systematically,
and apparently synchronously, dismantled and abandoned. The archaeological evidence will be examined in detail including data from excavations, remote sensing and LiDAR survey. Comparative sites from early prehistory and the early Iron Age in Ireland and beyond will be studied. Visits to these sites will be combined with insight into the early medieval texts and stories relating to these important complexes and their attendant landscapes. The place of these later synthetic histories, and the anchor role that these complexes played in the vivid early literature of Ireland, will also be examined.

**Week 2 Case Study 1: late prehistory and the ‘Royal Sites’**

Deadline for Assignment 1: independent heritage institution Report—

Field Seminar 2: Hill of Tara, Bective Abbey, Trim Castle

The Hill of Tara is a low, prominent, eminence that is the most iconic heritage site in Ireland with a wealth of associated archaeology, history, myth and literature. On the summit are a large number of visible prehistoric monuments (and over one hundred other more obscured sites) ranging from a Neolithic passage tomb (‘Mound of the Hostages’—associated in legend with Niall Noígiallach)—to the ceremonial entrance way—the Teach Midhchuarta (the ‘Banqueting Hall’)—formalised access to the hilltop from the north, a Bronze Age cemetery (2200–1600 BC) that contained over forty elite burials and many barrows (burial mounds surrounded by ditches and external banks; c. 1600–800 BC). Renewed activity in the Iron Age included the creation of the large ‘Royal Enclosure’ (Rath na Ríg: fort of the kings, c. 250 BC) on the hill summit as well as two burials monuments Teach Cormac (Cormac’s house, after the mythical figure Cormac MacAirt) and the Forradh (‘the King’s Seat’). A small Iron Age cemetery (with burials similar to those at Knowth) was followed by series of figure-of-eight shrines, constructed of upright oak posts, at the site of the Rath of the Synods (referring to reputed important meetings of the early Christian Church) and a large circular shrine in the first century BC. The final activity at the Rath of the Synods was a defended residential enclosure surrounded by three concentric ramparts (c. 200–300 AD).

Following the arrival of Christianity in the fifth century the Hill of Tara attracted the attentions of early medieval scholars including Tírechán (‘Life of Patrick’, c. 670 AD). As part of the process of ‘creating’ histories and genealogies of the Uí Neill—the descendants of Niall Noígiallach (‘Niall of the Nine Hostages’), as well as origin myths for the Irish, these monks gave names to the various monuments at Tara (which would have looked exactly as they do now): these ancestral figures, drawn from myth and legend, included Niall, Cormac MacAirt, Laoghaire (reputedly the king of Tara at the time of St. Patrick), Medb (the sovereignty goddess of Tara) and Grainne.

The was a revival of interest in Tara as part of the growth of romantic nationalism in the 19th century and this attracted attention in the 1798 and 1916 risings against British rule as well as providing the venue of a ‘Monster Meeting’ (for ‘Home Rule’) held by Daniel O’Connell in 1943.

**Week 3 Case Study 2: early medieval society**

Complete Assignment 2: Site Report

Preparation for Field Seminar 3

Field Seminar 3: Clonmacnoise and Corlea

Early medieval society was based around the family (fine, a complex multigenerational social and legal unit) and the tribe (about 150 examples) cradled in a number of important social systems
including kinship, clientship, fosterage and formal concepts of honour. For these Ireland is fortunate in having a great deal of both historical documents (such as the Annals, Law Tracts, Genealogies, Hagiographies and a wealth of early literature) and archaeological data. For example, most families resided in ringforts (enclosed and defended farmsteads) of which over 40,000 can still be identified; excavation of many of these has revealed important details of the day-to-day lifestyle, farming economy, craftsmanship and transportation. Students will be introduced to early medieval society through multidisciplinary perspective including archaeology, history and literature which will include the role and status of women.

A specific genre of early Irish literature (‘The Death Tales’—royal deaths by wounding, burning and drowning) deals with these issues of secular and religious tension; these stories may well relate back to the Iron Age Bog Bodies—victims of ritual murder that display evidence for multiple fatal wounds. The extraordinarily well-preserved bodies provide important insights into pre-Christian society and socio-political customs.

The great monastery at Clonmacnoise (Cluain Mhic Nois: ‘meadow of the sons of Nos’) is one of the most complete religious complexes of early medieval Ireland (c. 400–1200 AD). Although reputedly founded in 548 AD by St Ciarán most of the remains (three high crosses, a round tower, eight churches, and over 600 early medieval graveslabs) date to the period between 800–1100 AD. Clonmacnoise became one of the most powerful, wealthy and influential monastic centres in Ireland. It had a famous school and scriptorium (for the copying and illumination of early manuscripts), and was an important centre for metal craftsmanship and stone carving. Significant persons associated with the monastery include St Ciaran, the later abbots Colmán and Odo, several kings of Tara (including Diarmait mac Cerbaill, Flann Sinna, Turlough and Rory O’Connor) and the infamous Dearbhforgaill (Derval). Clonmacnoise was virtually an island surrounded by the River Shannon and its floodplain (‘the callows’) and peatland. The monastery is on an important ‘crossroads’: the north-south axis of the River Shannon and the east-west route along a glacial ridge which was an important natural route (‘The Pilgrim Road’, an Slí Mhóir) from the prehistoric period. Since the early medieval period Clonmacnoise has been an important centre of Christian pilgrimage and spiritual devotion. There are also the remains of the earliest bridge in Ireland (c. 804 AD) and an impressive early Norman castle (1214 AD).

The Iron Age trackway at Corlea was construction in late 148 BC or early in 147 BC. It is made from oak planks 3–3.5m long and around 0.15m thick laid on rails around 1.2m apart. The road was at least 1.6km long. It is estimated that the sleepers alone amount to 300 large oak trees, or one thousand wagon-loads, with a similar volume of birch for the rails. These wooden trackways across bogs are very common and over one hundred other, smaller examples, were found in the Corlea area. Part of the trackway was conserved and placed back in its original location in a special building. The Corlea Trackway appears to have been constructed in a single year, and suggests comparisons with the early
medieval tale *Tochmarc Étaíne* (The Wooing of Étain), where king Eochu Airem sets Midir tasks such as planting a forest and building a road across a bog where none had ever been before at a place called Móin Lámrai.

**Week 4 Case Study 2: early medieval society**

Complete Assignment 3: Essay

Field Seminar 4: Maynooth Castle

**ASSESSMENT**

**Assignment 1** Independent Visit to a Cultural Heritage Site or Institution: 25%

Students will make an independent visit to at least one cultural heritage institution (from an approved list that includes three venues of the National Museum of Ireland in Dublin, the National Gallery of Ireland [all free], St Patrick’s Cathedral, Dublin Castle, Trim Castle [entry fee]) and respond to a questionnaire dealing with their impressions and assessment of the cultural experience. They can attend as individuals or in groups; sites visited by students in the course of other field trips (such as Castledermot) may be accepted for this assignment.

**Assignment 2** Site Report: 25%

Students will prepare a short written paper (less than 1000 words) on an aspect of the Cultural Heritage of the Hill of Tara, Bective Abbey or Trim Castle.

**Assignment 3** Essay: 50%

This (1500 words) will be on one of a number of topic options dealing with an aspect of the Cultural Heritage of the ‘Royal Sites’ or early medieval society.

All written assignments must be submitted before the end of the course.

**Some core reading:**


Ní Bhroilcháin, M. 2009 *An Introduction to Early Irish Literature*. Four Courts Press, Dublin.


Stationary Office, Belfast.

ENDS