



UNIVERSITY *of* LIMERICK
OLLSCOIL LUIMNIGH

WT4208

Lecture 0-0
Building Services II



Course Overview



UNIVERSITY *of* LIMERICK
OLLSCOIL LUIMNIGH

Course Motto

**“I hear and I forget
I see and I remember
I do and I understand”**

Ben Franklin



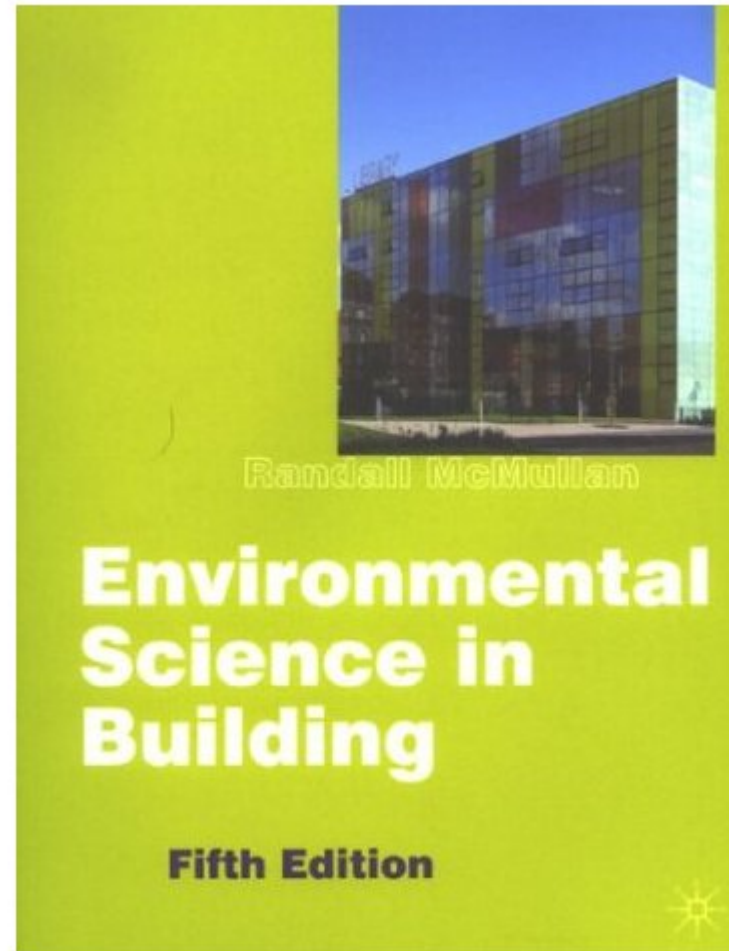
WT4504 Building Services I

- **Lecturer:** Dr. Colm Cryan
 - **Room:** SR2013
 - **email:** colm.cryan@ul.ie
-
- **Successful students will come to class with assignments already attempted**



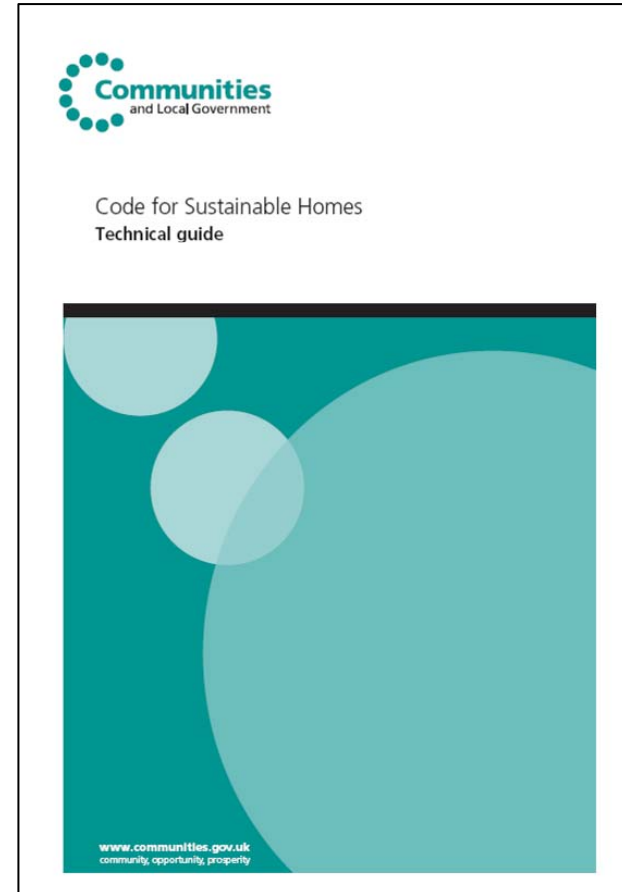
Recommended Text Book

- McMullan, R. (2001)
Environmental Science in Building 5th Edition. London
UK: MacMillan
- **Course Material**
 - Your class notes
 - The referenced books
 - **SULIS material**
 - Code for Sustainable
 - Lecture notes
 - Personal reading
 - **Material from other classes:**
 - Particularly Building
 - Services I



Required Reading

- **Code for Sustainable Homes (CfSH) Technical Guide**
- **2009 May VERSION 2.0**
- **Official method for calculating and rating the sustainability of homes in the UK**
- **Provided on SULIS**



Aims

- **This course aims to teach about;**
 - Importance of Services to People
 - Systems (Holistic) Thinking
 - Assessment Techniques
 - Building Services WT4504 1-1 Energy
 - Building Services WT4504 1-2 Water
 - Building Services WT4208 1-1 Sustainable Services
 - Building Services WT4208 1-2 Electrical
 - Building Services WT4208 1-3 Lighting
 - Building Services WT4208 1-4 Sound
- **Students should understand at a system level how to deliver Sustainable Building Services to their Projects**
- **Core to this module is understanding how to think about services**
 - There are many other services that could be discussed
(Fire Suppression, Motion, Communications,...)
 - Services evolve
New demand, new technology,...



Lecturer Bias

- **Qualifications**
 - **BSc (honours) Physics**
 - **MEng Material Processing**
 - **PhD Optical Communications**

- **Project Management Experience**
 - **Deployment of ICT Infrastructure**
 - **Test facility Design, Build and Operation**
 - **Sustainability in Built Environment**
 - **Refurbishment of Heritage Buildings**
 - **Commercial Management**
 - **15 working in United States of America**
 - **Building Physics**



Academic Honesty

- **The MST Department adheres to the strictest standards of academic honesty. An important aspect of achieving these standards is to be sure that students are aware of faculty expectations regarding academic honesty. This statement is an attempt to clarify these expectations as they apply to this course.**
- **Projects and Quizzes**
 - **Projects and Quizzes performed by students for submission serve the following two purposes:**
 - Are seen as educational devices to help students master the course material. This includes the concepts, theories, methodologies, and tools presented in class and recitation as well as such skills as working in teams.
 - Help the faculty evaluate how well each student has mastered the course material
 - **Thus, policies regarding academic honesty are intended to balance these two purposes and, unless otherwise stated, apply to all assignments**
 - **Students taking this class can work together to conceptualize general approaches to assignments. However, unless otherwise specified for a particular assignment, the work you submit must be done completely on your own. This includes text, numerical calculations, mathematical derivations, diagrams, graphs, computer programs and output. You are also expected to properly reference the source of any information used in a submission that is not your own. This includes any book, article, Web page, presentation or personal correspondence that you used for your work.**
 - **It is also inappropriate to use assignments, problem sets or projects submitted in previous years as a source, unless otherwise indicated.**
- **If you have any questions about how these policies relate to a specific situation, please speak to the teaching staff of this course for clarification**



Assessment

- **40% Project**
- **60% Semester Examination**
 - Four (4) questions,
 - Answer all four (4)
 - Two (2.5) hours



Repeats

- **60% Semester Examination**
 - Four (4) questions,
 - Answer all four (4)
 - Two (2.5) hours

- **Project work result carried forward and cannot be repeated**



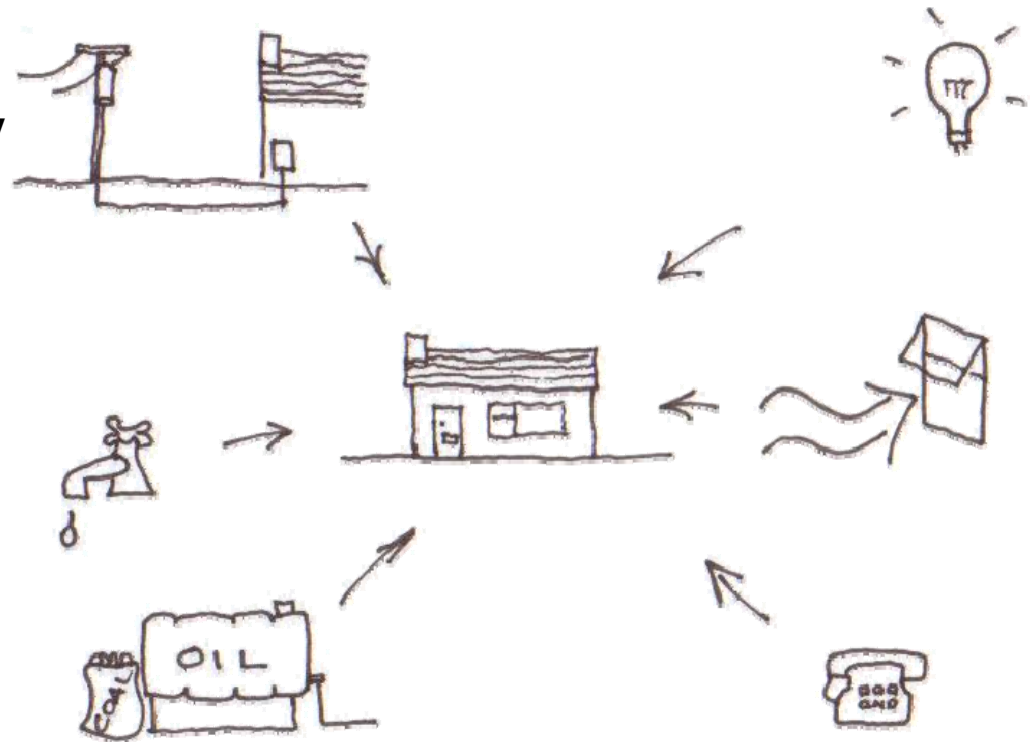
Exam Advice

- **Every aspect of discussion must be considered**
- **It is unlikely that a student that fails to attend the weekly class will pass the course**
- **You should bring a engineering/scientific calculator to the exam**
- **There will be no Aide Memoir permitted in the final exam**
 - **Students can NOT bring any written material into the exam**



Overview

- **Introduction**
 - Understanding Nature and the Environment
 - The links between the Natural and built Environment
 - Terms and Definitions
 - Environmental Assessment
- **Services**
 - Part 1: Sustainability
 - Part 2: Electricity
 - Part 3: Lighting
 - Part 4: Sound



Comments Questions or Discussion

