“Research is formalized curiosity. It is poking and prying with a purpose.”
Zora Neale Hurston
Useful Information

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**Course Materials:**

➤ **Slides:**
  [https://www.scss.tcd.ie/Nina.Bresnihan/teaching/cs8002.html](https://www.scss.tcd.ie/Nina.Bresnihan/teaching/cs8002.html) and Blackboard
Expectations

- What do you expect to learn?
  - Research skills
  - Writing skills
  - Presentation skills

- What do you expect to experience?
  - Heartache
  - Frustration
  - Stress
  - Relief
  - Pride

- What do you expect to gain?
  - Maturity
  - Insight
  - M.Sc. in Management of Information Systems!
How to Fail

- Defer starting
- Lack of communication with supervisor
- Analysis paralysis
- Ambiguous research question
- Poor choice of research methodology
- Diversions
- No [contingency] plan
- And plenty more ....
How to Succeed

- The opposite of the last slide!
Research Methods Aims

- To support you in the writing of your dissertation
- To equip you with the means to conduct rigorous research.
Knowledge and experience of research methods enables managers to:

- Make evidence-based decisions
- Identify and effectively solve problems in the workplace
- Discriminate between good and bad research
- Appreciate the multiple influence and factors impinging on a situation
- Take calculated risks in decision making
- Commission research projects
- Work with researchers and consultants
CS8002 on the Timetable

- Structured Time
  - Lectures
  - Workshops
  - Training Sessions

- Project Time
  - Supervisor Meetings
  - Working Independently
  - Library
  - Sharing
Workshops

- Formulating your Research Question
- The Literature Review Process
- Choosing an Appropriate Research Methodology
- Data Collection
- Data Analysis
- Academic Writing
- Etc.
Resources

- Blackboard
- Course web page
- Student Handbook
- Past Projects
- Projects from other courses
- Library
- Web
- Me
- Each other
- Supervisor
Role of the Supervisor

- How to handle your supervisor
  - Regular face-to-face meetings
  - Regular updates
  - Build a professional relationship
  - Maximise their time and experience

- What to expect from your supervisor
  - Highly experienced Information Systems professionals and academics
  - Insight and direction
  - NOT a project manager
  - NOT a proofreader
Dealing with Problems

- Sooner rather than later
- Supervisor
- Course Director
Dissertation Milestones & Deliverables

- Michaelmas Term:
  - Week 3: Presentation of Research Questions
  - Week 4: Project Proposals
  - Week 7: Submit Ethics Approval (as required)
  - Week 10: Literature Review Presentations

- Hilary Term
  - Week 2: Methodology & Implementation Presentations
  - Week 11: Draft submitted to supervisor
  - Week 12: Draft Presentations

- 1st May 2018 – Final Submission
Project Proposals

- “Project proposals are documents designed to present a plan of action, outline the reasons why the action is necessary, and convince the reader to agree with and approve the implementation of the actions recommended in the body of the document”, wiseGEEK.com

- Each student is required to submit a Project Proposal in Week 4 to ensure that the project is relevant, feasible and substantive enough for M.Sc. level.
Project Proposals

- The proposal will be submitted online. A link will be sent out by the end of this week.

- Submissions will be viewed by me and the Course Director, Diana Wilson.

- After consideration, supervisors will be allocated and you will be able to continue a dialogue to polish your proposal.
Structure of the Proposal

- Personal Details
- Background
  - Outline the context – WHO, WHAT, WHERE, WHEN and WHY and briefly explain the need being addressed
  - *Helping to answer: What is the need being addressed in your study?*
- Research Questions (more anon)
- Literature review
  - Outline the list of theoretical themes you will analyse, critique and use to defend your question, design and methodology
  - *Helping to answer: What is the theoretical underpinning of your research?*
Structure of the Proposal

- Methodology & Fieldwork (how you propose to conduct the project)
  - Research can include laboratory or field experiments, surveys, questionnaires, interviewing, theory development, design science, participant observation, proof of concept and other research techniques.
  - What methods you will use, research or otherwise
  - Discussion of issues of access and ethics
  - How you propose to develop your findings (anticipated results)
  - *Helping to answer: How will your questions be answered?*

- Your proposed working schedule
  - October November December January February March April
  - *Helping to answer: Is your proposal implementable?*
Before you start writing your Proposal...

- Research Question
- Project Plan
- Agree on a Reference Management System (e.g. EndNote)
- Reflect!
Resources

- The Library
- Previous projects
- The Association for Information Systems has a variety of resources available to assist you in researching information systems, http://aisnet.org/?Research
Let us begin...

- **What is research?**

  - Data are collected **systematically**.
  
  - Data are **interpreted** systematically.
  
  - There is a clear **purpose**: to find things out.
What?

- Systematic:
  - will involve an explanation of the methods used to collect the data,
  - will argue why the results obtained are meaningful, and
  - will explain any limitations that are associated with them

- To find things out:
  - you have a clear purpose or set of ‘things’ that you want to find out, such as the answer to a question or number of questions.
...Research is an organized, systematic, data-based, critical, objective, scientific inquiry or investigation into a specific problem, undertaken with the purpose of finding answers or solutions to it. (Sekaran & Bougie 2010)
The Problem Area

Examples of broad problem areas that a manager could observe at the workplace:

- Training programs are not as effective as anticipated.
- The newly installed information system is not being used by the managers for whom it was primarily designed.
- Not sure where to set up operations.
- A new customer database is needed and it's not known whether to buy or build in-house.
- A server running multiple batch processes is crashing every night.
- Customer relations are poor due to lack of manpower.
Overview

The usual approach is as follows:
- Read the research literature on a particular topic of interest;
- Identify a specific question worth answering;
- Design a research study that will answer the question;
- Conduct the study in a carefully-controlled way;
- Analyse the results in a rigorous fashion;
- Draw valid conclusions and evaluate your project (answer your question!)
- Write up the whole project, communicating your results and conclusions clearly.

(MIS dissertation guidelines)
How?

Research Question

- Identify a specific question worth answering;

Literature Review

- Read the research literature on a particular topic of interest;

Research Design

- Design a research study that will answer the question;

Data Collection

- Conduct the study in a carefully-controlled way;

Data Analysis

- Analyse the results in a rigorous fashion;
- Draw valid conclusions and evaluate your project

Write Dissertation

- Write up the whole project, communicating your results and conclusions clearly.

The Research Process
The Research Question

- Defining a clear Research Question which addresses your problem area is key to the success of your research.

- Must be answerable!
  - At this time
  - By this researcher
  - In this setting

Research Question workshop LB1.20 7.30pm