EV7125 Module Specification

Module Title: Applied Research Design	**Module Code:** EV7125 **Level: 7** **Credit: 15** **ECTS credit: 7.5**	**Module Leader**: John Leah **Additional tutors:** Ruth.Stevenson Jane. Fisher All members of GSE Team to contribute their specialist knowledge of research methodologies and methods
Pre-requisite: none	**Pre-cursor: none**	
Co-requisite: none	**Excluded combinations: none**	**Suitable for incoming study abroad?** N

Location of delivery: CAT and online – blended delivery

Summary of module for applicants:

The Applied Research Design module is designed to support students in understanding critical thinking skills in relation to interventions, projects and research, layering and scaffolding progressive layers of understanding. This module will support students in developing a proposal for following either a conventional dissertation route or with the incorporation of a design element (in for example the Green Building MSc).

Main topics of study:

With a focus and framing of undertaking projects and research for real world problems, the module will explore:

- Philosophical basis of differing research strategies and methods (quantitative, qualitative and design approaches);
- Applying knowledge about methodologies to appraisal of interventions, projects and research studies;
- Critical literature reviewing;
- Constructing research problems and questions;
- Intervention, project or research design, e.g. survey; longitudinal studies; experiment; construction and design;
- Sampling and Data collection methods such as interviews ; focus groups ; participant and non-participant observation ; questionnaires , modelling, artefacts; case studies; ethnography; experimental testing, monitoring.
- Research design principles;
- Data analysis: e.g. quantitative analysis; thematic and content analysis of qualitative data;
- Data presentation;
- Ethical considerations and research governance (including research governance procedures)
- Formulating research proposals and preparing for the dissertation

Learning Outcomes for the module

Where a LO meets one of the UEL core competencies, please put a code next to the LO that links to the competence.

- *Digital Proficiency - Code = (DP)*
- *Industry Connections - Code = (IC)*
- *Social & Emotional Intelligence - Code = (SEI)*
- *Physical Intelligence - Code = (PI)*
- *Cultural Intelligence - Code = (CI)*
- *Community Connections & UEL Give Back - Code = (CC)*

- *Cognitive Intelligence – Code = (COI)*
- *Enterprise and Entrepreneurship (EE)*

At the end of this module, students will be able to:

Knowledge

1. Demonstrate advanced understanding to critically analyse, evaluate and apply a variety of intervention, project and research approaches, philosophies and methodologies, e.g. quantitative, qualitative, construction and design approaches. *(COI) (DP) (IC)*
2.
3. Form a synthesis of knowledge through critical review, evaluation and synthesis of literature in a given area, as a basis for designing an intervention, project, design and construction and research project *(COI) (DP) (IC)*

Thinking skills

4. Critically analyse the strengths and weaknesses of the approach of different studies that have engaged a variety of research strategies and methods *(COI) (DP) (IC)*

Subject-based practical skills

5. Effectively formulate a research study or construction and design proposal. *(COI) (DP) (IC)*
6. Evaluate the ethical dilemmas and risks when problem solving and designing interventions, projects and research *(COI) (SEI) (EE)*
7. Engage in research relevant to community issues *(CC)*

Skills for life and work (general skills)

8. Effectively communicate ideas, proposals and findings to a wider audience. *(COI)(SEI)*

Assessment methods which enable students to demonstrate the learning outcomes for the module; please define as necessary:	**Weighting:**	**Learning Outcomes demonstrated:**
1. Poster and 300 word supporting paper: (1,200 word equivalent);	40%	2,4,7
2. Research Design Proposal (1,800 words)	60%	1,2,3,4,5,6,7

Reading and resources for the module:
These must be up to date and presented in correct Harvard format unless a Professional Body specifically requires a different format
Core

Biggam, J (2021) *Succeeding With Your Masters Dissertation: A practical Step by Step Handbook* New York Open University Press (earlier versions available as an eBook from the UEL library collection).

Cottrell, S (2017) *Critical thinking skills: effective analysis, argument and reflection*. Third edition. London : Palgrave Farrell, P (2016) Writing Built Environment Dissertations and Projects: Practical Guidance and Examples John Wiley and Sons [available as an eBook from UEL Library collection]

Recommended

Furseth, I. & Everett, E.L. (2013) *Doing Your Master's Dissertation. From Start to Finish.* Los Angeles, London, New Delhi, Singapore, Washington: DC Sage Publications Ltd (available as an eBook from the UEL library collection).

Knight, A and Ruddock, L (eds.) (2009) *Advanced Research Methods in the Built Environment.* London: Wiley-Blackwell [abridged ebook available from Google books]

McMillan, K and Weyers, J.D. B. (2012) *How to improve your critical thinking & reflective skills.* Harlow, England : Pearson

Below are some examples of useful references that cover all types of research approaches. Students will be guided to be selective in what they read depending on their approach and proposed methods:

Breach, M. (2008) *Dissertation writing for engineers and scientists.* New Jersey: Prentice Hall. (Available as a download)

Bryman, A. (2021) *Social research methods*. 6th Edn. Oxford: Oxford University Press. (older editions available second hand)

Creswell, J. W. (2017) 5th Ed *Research design: qualitative, quantitative, and mixed methods approaches*. Thousand Oaks: Sage Publications.

Design Council (2004) *What is the framework for innovation? Design Council's evolved Double Diamond | Design Council*

(Denzin, N. and Lincoln, Y (2017) *The SAGE Handbook of qualitative research*, London: Sage Publications (2011 edition available in UEL library- hard copy)

Denscombe, M. (2017) 6th Ed.T*he good research guide for small scale research projects* Maidenhead: Open University Press (available as an eBook from UEL)

Ford, E. D., and Ford, E. David. (2000) *Scientific Method for Ecological Research*. Cambridge, UK; New York: Cambridge UP,

Montgomery, C. (2012) D*esign and analysis of experiments.* 8th edn. New York: John Wiley & Sons.

Further relevant journals, websites and other relevant resources will be provided within reading materials that are made available for the module.

Provide evidence of how this module will be able to demonstrate at least one of the following examples/ exposures

Group work using case studies of current live and applied projects will be explored (including the use of inquiry and problem-based learning activities, case study analysis, stakeholder analysis etc)

Where applied projects involve businesses, 3rd sector organisations or social enterprises, company/engagement visits will be used to follow through issues and opportunities explored in lectures, seminars and group work

Indicative learning and teaching time (10 hrs per credit):	**Activity**
1. Student/tutor interaction: Contact learning: 30 hours	Lectures, inquiry and problem based group work, seminars, tutorials, project supervision,demonstrations, practical classes and workshops
2. Student learning time: Self directed learning: 120hr	Activity (e.g. seminar reading and preparation/assignment preparation/ background reading/ on-line activities/group work/portfolio/diary preparation, unsupervised studio work etc):
Total hours (1 and 2): 150 hours	

For office use only. (Not required for Programme Handbook)

Assessment Pattern for Unistats KIS (Key Information Sets)	**Weighting:**
Coursework *(written assignment, dissertation, portfolio, project output)*	
Practical Exam *(oral assessment, presentation, practical skills assessment)*	
Written Exam	

HECoS Code:	
UEL Department:	