University of the West of Scotland

Module Descriptor

Title of Module: Post Graduate Research Methods			
Code: QUAL11026	SCQF Level: 11 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)
School:	School of Computing, Engineering and Physical Sciences		
Module Co-ordinator:	Chimaobi Alutu (PA) and Rehab Iftikhar (LR)		

Summary of Module

This module discusses how to develop research, the various approaches that are used in carrying out research, and finally discusses how to present research results both in verbal and written forms.

Students will be shown different approaches to research including both qualitative and quantitative methods. Students will also learn about the types of tools and techniques that may be employed within these methods, including the use of literature review, focus groups, surveys, questionnaires, interviews, experiments, and case studies.

The use of different data analysis methods to describe and interpret both qualitative and quantitative data is explored.

Other issues covered in the module include planning, use of library resources, doing a literature review, critiquing published research, and legal and ethical constraints,

The assessment for the module requires the student to demonstrate their ability to propose, and plan the execution of, a piece of research suitable for academic work at MSc level.

This module will develop a range of graduate attributes, including numeracy skills, problem formulation, problem-solving skills, and the ability to present a clear argument.

Graduate attribute covered by this module include:

Universal

- Critical Thinker
- Ethically minded.

- Research-minded

Work Ready

- Problem-Solver
- Effective Communicator
- Ambitious

Successful

- Autonomous
- Resilient
- Driven

Module Delivery Method					
Face-To-Face	**Blended**	**Fully Online**	**HybridC**	**Hybrid 0**	**Work-Based Learning**
☒	☒	☒	☒	☐	☐
See Guidance Note for details.					

Campus(es) for Module Delivery						
The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
☒	☐	☐	☒	☒	☒	LUBM

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	☒	Term 2	☒	Term 3	☒

Learning Outcomes: (maximum of 5 statements) **These should take cognisance of the SCQF level descriptors and be at the appropriate level for the module.** At the end of this module the student will be able to:	
L1	critically explore and identify research areas in their subject discipline that are fertile, and formulate specific problems in these areas that are research-worthy

L2	critically understand, and know how to apply, various types of research method in their subject discipline
L3	understand the importance of ethics in research and how it is applied.
L4	construct, communicate, and defend a research strategy that is appropriate to the level of an MSc research project

Employability Skills and Personal Development Planning (PDP) Skills

SCQF Headings	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	SCQF Level **11** Critically evaluate characteristics of reliable research strategies, ethical issues in research, using data as support in an argument
Practice: Applied Knowledge and Understanding	SCQF Level **11** Use of online/offline data collection facilities and application of auditing skills for solving research problems; practical exercise in self-criticism
Generic Cognitive skills	SCQF Level **11** Critical selection of strategies and tools
Communication, ICT and Numeracy Skills	SCQF Level **11** Use of appropriate computer software for written and oral presentations. Critical discussion of ICT tools in support of research objectives (e.g., data collection and analysis).
Autonomy, Accountability and Working with others	SCQF Level **11** Responsibility for selection of research topic, ownership of research process including integrity of source usage (e.g., literature, ethical practice)

Pre-requisites:	Before undertaking this module, the student should have undertaken the following:	
	Module Code:	**Module Title:**
	Other:	
Co-requisites	**Module Code:**	**Module Title:**

*Indicates that module descriptor is not published.

Learning and Teaching

In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.
 	
The module is aligned with the updated curriculum framework of UWS.
   1. Student-centered: the material and case studies are based on different sectors to reflect the experience of the students from different degrees and contextualize their learning. Tutorial time and discussion forums (Classrooms, AULA, MS Teams) allow for multiway communication between students and lecturers.
   2. Flexible and Hybrid: Teaching material is available on the online learning platform including slides, recording, practical exercises, and additional learning to complement each week's topic. Online lectures are available, and the recorded ones allow for students to watch or Re- watch what they may have missed. The module is designed for full time, part time and Distance learning students.
   3. Simple and Coherent: The learning content, which is communicated from the start is set in a linear way to ensure learning is progressing smoothly with designed check in milestones to assess progress (e.g., online quizzes and review sessions)
   4. Authentic: Discussions and Assessment are based on students' experience centered around the learning material
   5. Inclusive: All material is available in written, audio format with subtitles and transcripts where feasible
   6. Sustainable: Material is updated annually and reflects what is happening in the sector and taking into consideration the student's feedback from formal and informal channels
The module comprises lectures and independent study. Guest lectures are used, wherever possible, to help extend students' contact with active researchers in the school and to provide specialist knowledge (e.g., statistical analysis, Ethics considerations/application). Further useful materials on research approaches, methodology, and practical guidelines for undertaking research are provided on AULA in addition to class examples and exercises.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	24
Tutorial/Synchronous Support Activity	12
Independent Study	164
	Hours Total: 200

**Indicative Resources: (eg. Core text, journals, internet access)

The following materials form essential underpinning for the module content and ultimately for the learning outcomes: There are many excellent texts available about Research Methods. The list below indicates some useful texts we found.

Bell, E., Bryman, A. and Harley, B., 2018. Business research methods. Oxford University Press.

Greenfield, T., Greener, S., (2016), Research Methods for Postgraduates, John Wiley & Sons

Creswell, J.W. (2014) Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, (4th edit.) Sage

Saunders M., Lewis P. and Thornhill A., 2012. Research Methods for Business Students, 6th Edition, Pearson.

Taylor, S.J., Bogdan, R. and Devault, M., 2015. Introduction to qualitative research methods: A guidebook and resource. John Wiley & Sons.

Dawson, K., (2016), 100 Activities for Teaching Research Methods, Sage

Hammersley, M. and Traianou, A. (2012). Ethics in qualitative research : controversies and contexts / Martyn Hammersley and Anna Traianou. Sage

Whitbeck, C. (2011). Ethics in engineering practice and research / Caroline Whitbeck. Cambridge: Cambridge University Press, 2011. 2nd ed.

(**N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements

In line with the Student Attendance and Engagement Procedure: Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following:

Online and on campus attendance, as per teaching delivery Engagement online platform and classrooms.

- Prompt Attendance of Lectures- Students are expected to attend scheduled lectures promptly and actively participate by taking notes, asking questions, and contributing to discussions.
- Prompt Attendance of Tutorials- Students are expected to attend tutorials on time, prepared with any assigned readings or tasks. Active participation in tutorial discussions and activities is strongly encouraged.

- Weekly Access to Materials on Aula- Students are required to access Aula on a weekly basis to stay informed about updates, download lecture slides or readings, and engage with any online activities or discussions..

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. Aligned with the University's commitment to equality and diversity, this module supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, material will be presented electronically in formats that allow flexible access and manipulation of content. This module complies with university regulations and guidance on inclusive learning and teaching practice. Specialist assistive equipment, support provision and adjustment to assessment practice in accordance with the University's policies and regulations. More information on the University's EDI policies can be accessed at: https://www.uws.ac.uk/about-uws/uws-commitments/equality-diversity-inclusion/
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the school)

Supplemental Information

Divisional Programme Board	Engineering
Assessment Results (Pass/Fail)	Yes ☒No ☐
School Assessment Board	Civil Engineering and Quality Management
Moderator	Anupam Dey
External Examiner	A. Garad
Accreditation Details	This module is part of a degree programme accredited by APM: Association for Project Management
Changes/Version Number	1.12

Assessment: (also refer to Assessment Outcomes Grids below)
Assessment for the module includes formative assessments and two summative assessments.

The formative assessments include tutorial and guided learning exercises. Exercises that include reading exercises, data collection/analysis exercises, and quizzes to guide and test the student's knowledge.

Summative assessment includes class test, and written assessment elements. Assessment will be based on the following:
The continuous assessment component in this module will consist of a Class Test.

Assessment 1 – continuous assessment worth 20% of the final mark.

Assessment 2 – final written research proposal. Approximately 2000 words worth 80% of the final mark

(N.B. (i) **Assessment Outcomes Grids** for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.
(ii) An **indicative schedule** listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Assessment Outcome Grids (See Guidance Note)

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Test/Quiz		✓	✓		20	0

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Review/ Article/ Critique/ Paper	✓	✓	✓	✓	80	0
Combined Total for All Components					**100%**	**0 hours**