

## ASSESSMENT

Research proposal (20%)	First interim submission (10%)	Second interim submission (10%)	Research paper and poster (60%)	
			Moodle	The Hub
	March 2020		<b>Moodle SUBMISSION</b>	<b>Hardcopy FINAL SUBMISSION</b>

The module will be assessed through four components:

1. Research proposal (20%) –
2. First interim submission (10%) –
3. Second interim submission (10%) –
4. Research paper and poster (65%) –

### **First: Research proposal (20%)**

The research proposal to be uploaded on Turnitin by the deadline above should be around 1,500 words, maximum of five A4 pages (Arial font size 11).

The proposal should contain the following sections:

#### 0) Proposed research title.

Do not try to encapsulate the entire research aim into this. It should ideally be contained in one line of text, and certainly no more than two. It should capture the essential character of the research.

#### 1) Research context

Give briefly the reason you are interested in doing the research, which might be some general question that interests you, or some deficiency that you have noticed in the world around you. From a preliminary literature search, you must locate your research in the context of earlier work on this issue and satisfy yourself that what you propose is not already well known. This reading may also help you in establishing a research design or method.

#### 2) Research aim

Your research aim is the focus that will guide you in your work. A formal statement of this aim is one of the most important elements of your proposal, and one against which the other elements will be judged. It may be (but certainly does not have to be) in the form of a research hypothesis that you intend to test or an objective that your research is intended to achieve. It is preferable to limit yourself to one hypothesis or objective, which is usually sufficient for such a research project. If your hypothesis or objective is novel, then there is the chance of you adding to the body of knowledge.

#### 3) Research methodology

Establishing a research aim takes you some way towards framing the problem that you are investigating. You do not have a complete analytical framework, however, until you have established a research design. The design follows from the approach you take, that is from whether your research will be exploratory, descriptive, experimental, or otherwise. It must set out a method for collection and analysis of information that will allow you to draw reliable and valid conclusions about your research aim. What you want to do must be possible to achieve in the time available and with such resources as it is reasonable to expect to be available. Your statement should give us sufficient detail to be able to judge its *feasibility*.

#### 4) Possible obstacles

Evaluate the risk of not being able to reach your desired aim. You should take a cool look at such a possibility when you decide whether or not to pursue this research. If you find at the end of the research that you are unable to reach a conclusion, what is there for the examiners to assess? Think about what obstacles there may be to achieving your outcomes, or unknowns that add uncertainty to the success of your research project. Dealing with other people who have their own time schedules is an example, or:

- what happens if an essential source book is not available?
- what happens if the building you want to study won't give you access?
- what happens if the temperature logger fails in the middle of your measurement period?
- what happens if insufficient respondents answer your questionnaire?

This is not a check list of things that are difficult to do (such as needing to spend sufficient time, or needing to learn software). It is a realistic *risk assessment* in which you set out an "escape" route, or a "plan B", in the event of something happening over which you have no control. If you foresee no such possible hazards, then this is all that needs to be said.

#### 5) Principal resources

Think about what resources may be needed for completing your research, apart from your time, access to the library, and equipment that you already have. In particular think of resources that will involve expenditure of cash, or are in scarce supply, or involve booking time for which there is competition. Do not forget simple things like postage and printing if large numbers of questionnaires have to be distributed, or licences for computer software, or time needed using School equipment.

***You must state in this section whether or not you anticipate that ethics approval will be necessary***

#### 6) Outline research programme

The time available to you is so limited that it is essential for you to draw up a schedule for the middle period of the research giving yourself deadlines. You may not know enough about what the work will involve to be definite, but a schedule drawn up now can be the basis of deciding changes as the work progresses.

Other reasons for programming include:

- it can help further clarify your research aim and design;
- it can help define the activities needed to attain your aim, and their order;
- it will identify and time 'milestones' for reviewing your progress with your supervisor;
- it should ensure that effective use is made of resources;

- it will help to define priorities in your research plan, and so increase the likelihood of successful completion on time.

### **Second: First interim submission – Introduction and research context, Research methodology (10%)**

The first interim submission should include the first two sections of your paper:

1. Introduction and research context
2. Research aim and methodology

Research context / literature reviews is a key aspect of any academic research. It helps set the context for your research; building on previous work aiming to add to the current body of knowledge.

Following your research proposal submission, you will then be required to work on your defined research question for your chosen topic. Your literature review on this topic should aim to directly address / respond to your research question / hypothesis. You will need to establish the current state of knowledge in this area by undertaking good quality academic research and developing a viable conclusion and possible recommendations for future research within this area.

To undertake this literature review, you are required to:

- Start with your defined research question / hypothesis that you aim to respond to / address;
- Search for a number of quality sources from the available literature (at least 8);
- Actively engage with this literature and think critically about the knowledge provided;
- Synthesise the findings of these sources and develop a coherent argument;
- Draw a conclusion and introduce how your research work will contribute to the body of knowledge;

You will be required to submit at least 2,000 words

### **Third: Second Interim submission (10%)**

The second interim submission should include the first three sections and abstract of your paper:

1. Abstract
2. Introduction and research context
3. Research aim and methodology
4. Data analysis and discussion

You will be required to submit at least 3,500 words

### **Fourth: Final research paper and poster (60 %)**

In this research paper, you will prepare a report on the topic of your choice priorly defined in your research proposal. Your work should be presented in a specific format, as provided in the **SDBE\_Paper\_TEMPLATE.doc** document You may

download this word template from Moodle and use it to type in your own work, by replacing the existing text or you can find the research paper template in Appendix B: Relevant Key Forms (Research Paper Structure).

As you will note from the template; the format and layout of the paper should be the typical format of a conference, or journal paper: **abstract, introduction, related work/ literature, methodology, discussion/results, conclusion and future work, references.**

The assignment should be handled as the equivalent of submitting a paper for publication at a conference, where the audience you are referring to are already experts in the area. Hence, your work should add something to the existing knowledge in this field. Therefore, the more focused your work is, the easier it would be to publish it.

Your paper might rely on critical analysis of existing literature or might include a modelling based component, where you could use modelling depending on the topic and approach you choose to pursue. You will also need to generate your own data by using performance modelling software, for example:

- **Interviews**
- **Questionnaires**
- **Field measurements**
- **Software: Integrated Environmental Solutions or Design Builder**

Appropriate references are *very important* for this piece of work. Unfair practice (copying of material, not referencing, etc) will be subject to university regulations.

### **Learning outcomes:**

In your submissions you should demonstrate that you can:

- identify and setup an appropriate topic to investigate the chosen topic
- use a wide range of resources in your investigation
- understand the underlying concepts of your subject
- conduct an investigation independently in this field using appropriate methodologies
- effectively and concisely present and report your findings

### **Deliverables:**

The full paper, should be between **15-20 pages** long (min. 5,000 words), which should include all potential graphs, photos, references, etc. If there is a need to provide an appendix, you may use more pages, but only for the appendix section.

You should submit one electronic version of your work in pdf format.

Submission of the paper should be done via Turnitin on Moodle

Moodle submission deadline: [REDACTED]

Hard copy submission deadline: [REDACTED]

## **Assessment:**

The assessment will be related to the previous learning outcomes (see appendix B for the assessment criteria).

This assignment will count towards 60% of your module mark.

### **Assessment guidelines**

Final assessment is by online submission of coursework, in the form of PDF uploaded to Moodle.

- Coursework will only be accepted through the correct Moodle assignment upload. Any other method will be counted as a non-submission and will be given a mark of 0.
- Deadlines refer to the time when an upload must be completed and no allowance can be given for slow upload speeds and other variables.
- Files must be less than 100MB.
- Image quality must be sufficient for the work to be properly assessed.
- Any non-original text and images must be clearly and correctly referenced using the Harvard style of referencing.
- Late submissions (up to 24 hours) are subject to a 5% deduction of available marks.
- No submissions made after 24 hours will be assessed, unless a successful claim for extenuation is made.
- There is no assessment of this module from your Design portfolio.

It is your responsibility to ensure that you have a reliable internet connection, that you upload in good time with margin for error, and that your file is an appropriate size and quality. Note that the 5% deduction for late submission is equivalent to half a grade band and should only be used in an emergency or unforeseen complication.

*If you deliberately aim for late submission you are significantly downgrading the value of your work.*

Reassessments take place in early July 2020 and information will be available on Moodle. All reassessments are capped unless you have been granted extenuation.

The assessment criteria closely follow the assignment brief requirements – detailed briefs and examples of typical assessment forms.

In totality, the assessment criteria also ensure that the module Learning Outcomes are met - these are listed on the following page. Some of the Learning Outcomes also relate to many of the CIAT benchmarks.

We strongly suggest that you try to submit all coursework by the deadline set as meeting deadlines will be expected in employment. However, in our regulations, UEL has permitted students to be able to submit their coursework up to 24 hours after the deadline. The deadline is published in this module guide. Coursework which is submitted late, but within 24 hours of the deadline, will be assessed but

subjected to a fixed penalty of 5% of the total marks available (as opposed to marks obtained). If you submit twice, once before the deadline and once during the 24 hour late period, then the second submission will be marked and 5% deducted. This rule only applies to coursework. It does not apply to examinations, presentations, performances, practical assessments or viva voce examinations. If you miss these for a genuine reason, then you will need to apply for extenuating circumstances, or accept that you will receive a zero mark.

## Assessment Criteria

The section below gives you a general guideline of what we are looking for at Level 6 coursework in [REDACTED]. Please also refer to Appendix II for the assessment forms.

### Level 6

- Your work displays a comprehensive and detailed knowledge of the topic with areas of specialisation showing depth of understanding.
- You are aware of current developments.
- Without guidance you can analyse data and situations in a range of different contexts.
- You can develop creative and innovative solutions with little guidance.
- You can review evidence critically and use your findings to support conclusions and recommendations.

*Work of a better standard usually reflects an approach where*

- You have not required any additional assistance
- You have proved you can manage your own learning and make full use of a wide range of resources.
- You have been confident in your ability to solve problems.
- You have communicated your work in a thoroughly professional and coherent manner.

### Guidance on referencing

As a student you will be taught how to write correctly referenced essays using Mendeley <https://www.mendeley.com/> [REDACTED]

Cite them Right is the standard Harvard referencing style at UEL for all Schools apart from the School of Psychology which uses the APA system. This book will teach you all you need to know about Harvard referencing, plagiarism and collusion. The electronic version of "Cite Them Right: *the essential referencing guide*" 9th edition, can be accessed whilst on or off [REDACTED]. The book can only be read online and no part of it can be printed nor downloaded.

[REDACTED]

Notice is hereby given that all submissions for components [Research proposal, Research report and poster] of this Module must be submitted to

## LITERATURE REVIEW ASSESSMENT

	100%	85%	75%	65%	55%	50%	45%	35%	25%	>15%
MARK AWARDED										
<b>Subject - specific academic accomplishments (30%):</b>	<i>Knowledge and Understanding</i> - use of knowledge of relevant theories and literature, demonstrating an understanding of the dimensions of the discipline/ topic, its relationship to other frameworks, and the boundaries in which the subject matter is situated.									
<b>Feedback and explanation</b>										
MARK AWARDED	100%	85%	75%	65%	55%	50%	45%	35%	25%	>15%
<b>Intellectual curiosity (20%):</b>	<i>Research and inquiry</i> - learning about current research, developing the appropriate research skills and techniques, undertaking research enquiry, engaging with the research community.									
<b>Feedback and explanation</b>										
MARK AWARDED	100%	85%	75%	65%	55%	50%	45%	35%	25%	>15%
<b>Professional attributes and values (30%):</b>	<i>Critical reasoning</i> : Ability to demonstrate logical reasoning, synthesis and combination of different viewpoints dealing with complex and conflicting information, and drawing conclusions in the absence of complete data.									
<b>Feedback and explanation</b>										
MARK AWARDED	100%	85%	75%	65%	55%	50%	45%	35%	25%	>15%
<b>Practical and Personal Skills (20%):</b>	<i>Communication skills</i> - Ability to effectively communicate knowledge and critical understanding through the use of excellent communication, via all media, resulting in clarity of expression (including conforming to word count and referencing style).									
<b>Feedback and explanation</b>										

## RESEARCH PROJECT ASSESSMENT

Criteria	Mark	A 70% -100 %	B 60%-69%	C 50%-59%	D 40%-49%	E 30%-39%
INTRODUCTION: Abstract Research Question Aim(s) and Objectives	/10%	Abstract highly informative- an excellent reflection of the work. Excellent introduction. Very clear achievable research question, and/or aim(s) and objectives.	Abstract clearly summaries the work. Introduction is clear and explains the context of the work. Clearly stated achievable research question and/or aim(s) and objectives.	Abstract summaries the work. Introduction sets the scene for the work. Research question and/or aim(s) and objectives clear and achievable.	Abstract and introduction present but lack detail to clearly guide the reader. Research question and/or aim(s) and objectives stated but may be weak and not achievable.	Abstract and introduction weak, incomplete or missing. No clear research question nor aim(s) and objectives.
KNOWLEDGE RELEVANT DISCIPLINE: Includes literature search	/25%	Excellent communication from judiciously chosen sources. Sound analysis and evaluation. Selection of issues clearly links to research aim.	Good communication from a broad range of sources. Issues well chosen and reasonable analysis and evaluation.	Satisfactory communication from a reasonably wide range of sources. Some analysis and evaluation of material.	Communication skills weak with only a minimum of sources used. Minimum analysis and evaluation.	Poor communication with limited knowledge and little evidence of reading. Tends to be descriptive and does not analyse or evaluate.
RESEARCH METHODOLOGY: Appropriate Research Methods	/15%	Research methodology competent, with feasible research methods.	Research methodology clear and appropriate.	Satisfactory research methodology.	Research methodology poorly articulated and weak.	Inappropriate, incomplete or missing research methods.
ANALYSIS AND EVALUATION OF RESULTS: Results, Achievement of Research Focus Originality	/25%	Critical analysis and evaluation of all sources of data. Full achievement of research focus.	Some analysis and evaluation of sources of data. Reasonable achievement of research focus.	Analysis and evaluation acceptable. Acceptable achievement of research focus.	Weak analysis and evaluation. Limited achievement of research focus.	Minimal or no analysis or evaluation. Such research focus that was set has not been met.
CONCLUSIONS AND RECOMMENDATIONS: Conclusions Recommendations	/10%	Appropriate conclusions are drawn from critical analysis	Appropriate conclusions are drawn from reasonable	Conclusions are drawn from data gathered. Further research and	Some conclusions are drawn but analysis and evaluation are limited.	Conclusions not drawn from a critical analysis and evaluation of the

		and evaluation of data presented. Further research and recommendations are highlighted and originality is demonstrated.	analysis and evaluation of a limited range of data gathered. Further research and recommendations are mentioned and some originality is demonstrated.	recommendations are mentioned but not fully articulated. Little originality is demonstrated.	Further research and recommendations are weak or incomplete. No originality is demonstrated.	data. Further research and recommendations are incomplete or missing, and no originality is demonstrated.
STRUCTURE AND PRESENTATION: Contents List General Layout and Typography References/ Bibliography Literary Style & Approach Grammar, Clarity	/10%	Presentation polished imaginative approach to the topic. Thoughts and ideas clearly expressed. Grammar and spelling accurate. A highly evolved communication style which meets academic criteria.	Presentation is of a good standard. Thoughts and ideas are presented in a fluent fashion. Grammar and spelling are accurate. Referencing is on the whole good and supports arguments.	Presentation is of an acceptable standard. Thoughts and ideas are presented in a mainly fluent fashion. Grammar and spelling is mainly accurate. Referencing is on the whole sound with perhaps some detail missing	Presentation is weak. Thoughts and ideas are not presented in a lucid fashion. Grammar and spelling could be improved with attention to editing. Referencing requires attention.	Presentation poor and dissertation difficult to read. Thoughts and ideas poorly expressed. Grammar and spelling poor. Weak communication style with minimal or no referencing.
STUDENT PARTICIPATION: Evidenced by attendance and submissions of work in progress	/5%	Early and regular contact was maintained. The research was student driven.	Early and regular contact maintained. The research was student driven with a good level of control	Regular contact with supervisor maintained. The research required support to be provided by the tutor.	Limited contact with supervisor was maintained. The research does not reflect tutor guidance	Little or no contact with supervisor. Student has ignored advice provided.
Total Mark	/100%					
Comments						

## RESEARCH PAPER STRUCTURE

- Include a cover page first with the title of your research paper
- Include a page with a list of contents
- Then the below structure follows

**Title**

**Abstract**

- 1. Introduction and research context**
- 2. Research aim and methodology**
- 3. Data analysis and discussion**
- 4. Conclusion**
- 5. References**

# RESEARCH PAPER TEMPLATE

[REPORT TEMPLATE: PLEASE FOLLOW]

**The Title of the Paper should be Calibri, 14-point, bold, left-justified, paragraph spacing before 12pt and after 0pt, followed by one return**

**Abstract:** This abstract should be a maximum of 300 words. Font calibri, 10 point, normal, alignment justified, single space. Please note that there is a line tab between the abstract and the keywords

**Keywords:** Up to five, comma separated

**1. Introduction and research context [Headings level 1 – Calibri, bold, 12 point, paragraphs of headings should have the paragraph line spacing single and spacing kept 12pt before and 6pt after]**

Use this style for the first paragraph immediately after a heading. Notice it should not have any indentation. You have a **maximum of 20 pages including all images and references**. Please include page numbers.

Use this style when you need to begin a new paragraph. Notice the 1cm indentation. Follow as much as possible these guidelines and DO NOT reduce font sizes or spacing to include more data. Page layout should be single column, with top and bottom margins 2.54cm, left and right ones 2.54cm and document must be size A4. Main body of the text must be 12 point, with alignment justified. All paragraphs (except the headings) should have lines spacing single and spacing kept 0pt before and 0pt after.

**1.1 More detail on this section [Headings level 2 should be bold and italic font 12pt. They have line spacing single and paragraph spacing kept 6pt before and 6pt after]**

Be consistent throughout the paper and exclude any numbering of sections and subsections.

**1.1.1 Example of a heading [Headings level 3 should be italic They have line spacing single and paragraph spacing kept 6pt before and 0pt after]**

**1.2 Figures and Tables**

Put figures and tables in the main body of the text and do not forget to include a caption. Examples are provided below. When referring to the figure in the body of the text please adopt the convention Figure 1.

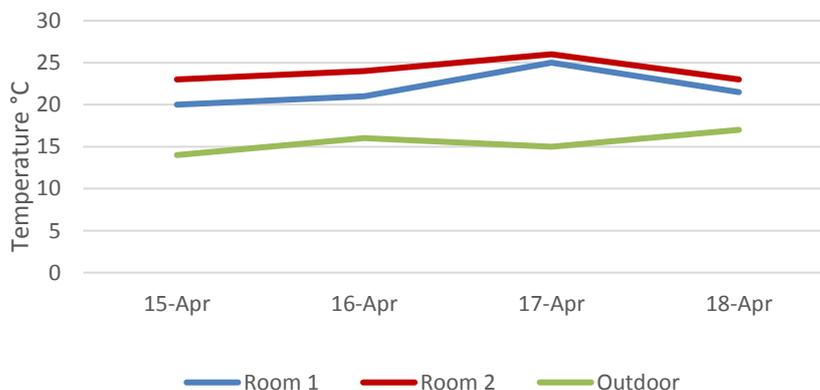


Figure 1. Caption should be positioned below the figure. Font size 10pt.

Figures and tables should be centred.

Table 1. Caption should be positioned above the table. Font size 10pt.

Rooms	Relative Humidity %
Room 1	65
Room 2	50

#### 4. Conclusion [Headings level 1 – Calibri, bold, 12 point, paragraphs of headings should have the paragraph line spacing single and spacing kept 12pt before and 6pt after]

Use this style for the first paragraph immediately after a heading. Notice it should not have any indentation. You have a **maximum of 20 pages including all images and references**. Please include page numbers.

Use this style when you need to begin a new paragraph. Notice the 1cm indentation. Follow as much as possible these guidelines and DO NOT reduce font sizes or spacing to include more data. Page layout should be single column, with top and bottom margins 2.54cm, left and right ones 2.54cm and document must be size A4. Main body of the text must be 12 point, with alignment justified. All paragraphs (except the headings) should have lines spacing single and spacing kept 0pt before and 0pt after.

#### 5. References

[References should be font Calibri, size 10 point. Please note the 1cm indentation.]

**Within the text, give author and year of publication in the Harvard style of referencing.**

E.g. (Smiths, 2005), for more than two authors put (Smiths et al, 2015). References should be listed at the end of the paper in alphabetical order of author using the Harvard's system. Examples are presented below:

Clarke, A. (2017). *Innovative Technology for Low Energy Retrofitting*. London: Low Energy Ltd [For books: Author(s), Initials. (Year). *Title of book*. Edition (only include if not the first edition). Place: Publisher]

Howard, J., (2016). Building Performance Evaluation. In: *SDBE International Conference London 2016*, London, UK, 20 - 21 Dec 2016. Docklands: University of East London [For conferences: Author(s), (Year). Full title of conference paper. In: followed by editor or name of organisation, Full title of conference. Location, Date, Place of publication: Publisher]

Ryan, K. (2009). Energy Conservation. *Energy and Buildings*, 65 (1), pp. 80-95 [For journals: Author(s), Initials. (Year). Title of article. Full Title of Journal, Volume number (Issue/Part number), Page numbers.]