

Appendix 2: Research Project II Guidelines

Introduction

The module RES402 Research Project II is an important component in the undergraduate programme. This module is designed to provide students with the understanding and first-hand experience of carrying out a research project by applying concepts/theories and practice, integrating multiple sources of information from different areas and test their analytical skills. It could be a laboratory, field based or desk-based research which will allow the students to specialize to some extent in a given field of study. It provides opportunities for students to demonstrate their capacity to work independently and produce reports of scientific standards. Considering the importance, 60-credits equivalent to 5 modules is allocated for the module and is a semester long project. It should be the most satisfying piece of work in their degree programme. However, student's inability to submit the expected result on time may result in not passing the semester.

This document presents comprehensive guidelines for both the staff and students who are involved in the research project. It sets out the basic rules and the "Dos" and "Don'ts" of the process, as well as gives general advice on how to undertake the project. It is very important that both the staff and students understand their own (and each other's) roles in the project. Therefore, the role of the Students, Supervisor, and the Research Project Co-ordinator are also outlined.

Roles of Research Project Coordinator, Supervisor and Student

Research Project Coordinator

The Dean of Academic Affairs (DAA) of the College will be the research project Coordinator (hereafter referred to as Coordinator). The role of the Coordinator is to oversee the overall management and administration associated with the research project. Any query or problem related to the administration and management of the research project may be referred to and settled with the DAA (Coordinator).

Supervisor

A supervisor is a faculty member who will guide the assigned student(s) from the inception till the submission of Research Project. The role of the supervisor is to *direct, advise and assess* the student through each stage of the Research Project. The supervisor should meet the student regularly at agreed time that suits both the parties. It is important to remember that the supervisor is *not* there to do the work for the student but to guide and assess the work of student until completion. The supervisor shall also give technical assistance to the student as required. The supervisor should encourage students to take initiative so that they learn to take responsibility for their work and do not become overly dependent on the supervisor.

At the start of the research project, the supervisor should assist the student in working out a timetable for various stages of the research work and this should be regularly updated as the research goes on. The supervisor should guide the student through *each* stage of the research and should advise the student on any difficulties s/he may experience.

If a supervisor is concerned about the performance of a student, this should be communicated to the co-ordinator so that corrective action can be taken on time. Supervisors are expected to be courteous and considerate to their students.

Student

The research project gives the student the opportunity to apply the skills they have acquired during the course works to produce a credible and high-quality research project report. The ultimate responsibility for the completion of the project lies with the student and the project should be the work of the student. In consultation with the supervisors, students are expected to develop initiatives in completing their work and should not depend on the supervisor to sort out all of their problems. Students should meet their supervisors at least twice in a month to discuss on their progress. It is the responsibility of the students to contact their respective supervisors to set up meetings. Given that supervisors have more than one student to supervise in addition to their day-to-day teaching and other academic assignments, they may not be in a position to meet the students at any time and therefore the students are expected to plan the meetings in advance. Meetings should be an exchange of views and not just involve the supervisor/stelling the student what to do and how to do it. Students are expected to behave with maturity in respect to their supervisors. This means that students should be courteous to their supervisors, accept direction, complete works as required and be punctual for meetings. Supervisors should be notified in advance if a meeting has to be cancelled. If a student has any query or problem with his/her project that cannot be resolved by the supervisors, the student can communicate this to his/her Programme Leader, who in turn will apprise the coordinator at the very earliest.

Identifying and Selecting Research Project Topic

Students are expected to identify research areas and topics that are of interest to them when RES301 (Research Methods) module is offered in the previous semester. They are also expected to complete the draft research proposal during the RES301 module. This will provide them ample time to conduct research especially if the research project is season-based field experiment. Ideas for research topic can come from a student's particular interest in any given area or could be some research projects put forward by faculty members of the Department. Students who have difficulty in identifying a research topic and supervisor should communicate this to their respective PLs or the coordinator who can assist them in choosing appropriate areas during the PCM. While identifying and selecting research topic, the students may like to keep in mind the following feasibility aspects:

Availability and Access to Data and Information

Mere availability of data should not be the prime factor in selecting a topic. However, it is essential to ensure that sufficient data exists and students are able to have access to it. In addition, the student must make sure that the data can be collected within various constraints to enable them to complete the project on time.

Literature

Students' project should, to a large extent, be based on a specific area of established literature. They should be able to demonstrate a thorough understanding of the literature and how it relates to their research questions.

Time Availability

Students should be careful not to attempt too large a task in the time available. To help determine this, their project plan should include estimates for each of the activities for the whole project and the necessary deadlines required in completing the project in the allocated time. If the problem looks unmanageable within the timeframe of one semester, then the student should try to break the scope of the study into smaller parts or limit its scope. The supervisor should be of key assistance at this planning stage of the Research Project.

Personal Skills and Interests

Students should choose topics within their capabilities and their interest including, perhaps their career ambition. They should carefully assess their interest and ability to see whether they match the proposed project. However, project may be used to learn new skills or to broaden their knowledge. Students need to make sufficient allowance in their plan for the extra time involved.

Need for Research

There should be an identified need for the study that is recognised by both student, staff, or by the relevant organisation. Although the result may not have immediate application, it is important that students or anyone involved feels that the study is worthwhile. The process of compiling a project can be lengthy and exciting so the knowledge that the work will make a practical contribution can help sustain motivation.

Ethical Clearance

Topics that require ethical clearance must be identified in the PCM and forwarded to the CAC for further action.

Risk Involved

It is important to remember that a BSc research project is a programme requirement and it must be successfully completed. So, students need to assess whether the research project can be completed on the expected time scale or not. Students must be certain that they will be able to finish the project in order to satisfy the programme requirement.

As soon as the proposal topic is approved the supervisor/s will directly communicate the same to the coordinator with a copy to concerned PL. At this stage, it is just a working title and can be changed at a later date. However, if a major change in topic is required then due process should be followed (see the section on process in changing approved project proposal title).

Process in Changing Approved Research Title

Initially approved research project title can be changed under certain circumstances. However, in doing so, due process should be followed. The process involved in this includes - the concerned

student will explain/justify to his/her supervisors through an application for the change in topic (Form No. 9). In the event the supervisor is convinced with the justification, she/he will forward the application to the PL with a remark for endorsement. A copy of the same will also be provided to concerned PLs and the PLs will record the change for verification at a later stage. In the event of failing to observe this due process and if the topic maintained with the PLs does not match with student's topic, then the final research project resulting from such discrepancy will be treated as null and void.

Change of supervisors

The student should ensure that both supervisors (the former and the latter) are informed and have consented to the change of supervision. Students must use Form 9 to change their supervisors.

Developing Research Proposal

After identifying and selecting a topic, students should develop a research proposal. The research proposal should include a brief background/importance of the intended study, research question(s) to be investigated, objective(s), a brief literature review connected to the proposed study, methods and materials needed to achieve the research objective, work plan/ calendar of activities and the estimated budget. The proposal will be reviewed by the panels of the relevant department in groups.

Proposal Approval and Ethical Clearance

Without a proposal approval, students should refrain carrying out any research project work. Once the proposal is approved, student may not be allowed to make major changes in it. However, if this is unavoidable then similar to changing approved research topic, due process should be followed. The Office of the Dean of Academic Affairs will facilitate the process if the research project proposal requires ethical approval to be sought from relevant organisation.

Structure/Components of Research Project Proposal

The following notes provide students with the structure and components of the research proposal. While developing a proposal, students are encouraged to regularly discuss and seek advice from their respective supervisors. The proposal should be word-processed using Times New Roman, 12 font size, 1.5 spaced and be between 5500 to 6000 word excluding references. The proposal should have the following components:

Research Project Topics

A topic should be as catchy as possible. It should be limited to about 15 words. If possible, it should carefully chosen so that it meets the SMART (Specific, Measurable, Achievable, Reliable and Timely) criteria. The initial letters of the topic should be capitalized except for prepositions and articles unless it falls in the beginning of the topic (e.g. Ecological Behaviours of Mammalian Species at Natural Saltlicks of Jomotshangkha Wildlife Sanctuary, Samdrup Jongkhar.)

Background/Problem Statements

This section should first provide a brief background or introduction to the study and then spell out the importance, relevance and the need for the study by putting together a succinct context of the problems that need to be investigated. This section should have at least 1000 to 1500 words.

Research Questions and Hypotheses

A proposal should have clear research questions to be subsequently answered by the research objectives. The inclusion of hypotheses is optional.

Objective(s)

A proposal should have clearly stated objective(s), which should be related to the problem statement(s) and be aligned with the study topic. It is not advisable to have more than two objectives, unless the study truly merits more objectives.

Literature Review

Literature review should contain that information that are not only relevant to the study but are also current. Further, the information presented in this section should be sourced from those authors or sources which are credible in that particular field of study. This section should be between 3000 to 3500 words.

Methods and Materials

Along with describing the study area where this study will be conducted, this section should outline the research methods or designs and other tools that will be needed and be used for this study. It should also include specific statistical test(s), sampling methods and sample size. This section should be between 1500 to 2000 words.

Work plan

This section should outline the various activities that will be needed to fulfil the objective(s) of the study and when each of these activities will be carried out. This plan will also serve as a handy guide to the student. It could be of one page.

Budget

It may be worthwhile to work out a rough estimate of the budget more so if the student is looking for external funding. The budget can be worked out for each activity (appendix 1: work plan and budgeting).

References

While writing a proposal, students are expected to do as much reading as possible to get good grasp of the topic they are planning to further research on or to get idea on the area of their interest or to capture research gaps so that they can pursue further research on the same. This section should contain a minimum of 20 references. The references should, to a large extent, be current.

Components and Contents of the Final Research Project

The following guidelines on the components/ structure and contents of each component of the research project should be followed strictly. The ideal word count should be 12000 to 14000 (excluding table of contents, figures, tables and references).

Title page

This should contain the title of the research project, affiliation, author's name, month and year.

Blank page

The first page after the hardbound cover should be an empty page.

Inside title page

This will be the first page of the research project. It should be the exact same copy of the title page.

Certificate

This page should contain the name of the supervisors and his/her signature. This page should be signed by the supervisor and co-supervisor/s only after verifying that all the changes and comments suggested by the examiners have been incorporated by the student. Students cannot print the final project without this certificate (Form No. 1).

Declaration

Students must declare that their research project is original and have not been submitted before for any other degree, and that all the sources of information and assistance received during the course of the study are duly acknowledged. This particular section should be dated and signed (Form No. 2).

Abstract

Ideally an abstract should contain one to two lines of background, if at all needed. If not, it could start with one to two lines of the objective(s) of the study. Next would be the highlight of the methods used in the study, again in about two to three lines. Results or the important findings are next, again in another two to three lines. This could be followed by another two lines of discussion of the important findings and another one to two lines of conclusions based on the important findings. In essence, the abstract should provide a bird's eye view of the research project in a concise manner, so that a reader need not refer to the whole report except for details. Normally abstract is written at the very end.

The abstract should not contain citations, illustrations and tables. It should be limited to 250 -300 words.

Use of paragraphs in abstract should be avoided. It should be single spaced and should not be italicized. Two spaces below the abstract, five keywords should be spelt out. Keyword is a one word term. Key terms in the keywords should be arranged in alphabetical order.

Acknowledgements

Students should acknowledge any form of assistance received from others during the course of the study.

Dedication (Optional)

If students want or feel the need to dedicate their work/research to someone else, they can do so here.

Abbreviations and Acronyms

This page should reflect all those abbreviations and acronyms used in the text for easy reference. This should be placed in alphabetical order. This section could also include foreign term(s).

Table of Contents

This should contain headings, subheadings and page numbers. All headings should be numbered and where necessary levels defined. Lists of Figures, Tables and Appendices should also be provided. If the number of tables or figures is less than five then the list of Tables and List of Figures should be reflected in one page after maintaining appropriate space between them.

The List of Appendices could be continued in the main Table of Contents instead of starting on a fresh page unlike the List of Tables and Figures.

Introduction

This section should describe and explain the background of the problem/phenomenon being studied and set it into a specific context. It should provide convincing justification/rationale, reasons, relevance and importance for the study/investigation. How the study would add new knowledge to the existing body of knowledge should also be explicitly described.

Introduction, rationale of the study and objectives/specific objectives will constitute Chapter One.

Literature Review

This section briefly examines the history of thought which explains the current situation and the theory of the topics the students are working on, i.e., animal sciences, agriculture, environment, natural resources, marketing, economics etc., and which shows that there have been other inquiries into the general area and what their conclusion(s) is/are.

This section should not contain the opinion(s) of the author(s) or contain very minimal opinion, if at all and in very appropriate space, preferably where the author(s) have done work on similar field/area in question.

This section should comprise Chapter Two.

Materials and Methods

This section will comprise Chapter Three. It should first outline where the study will be conducted, i.e. study area. The reason(s) for choosing a particular area for study should be provided along with other relevant information, such as, climatic and soil conditions if the study is related to

agriculture. It is also now becoming increasingly common to provide the geographical coordinates of the study area.

This section should then outline the sample size and sampling methods used to derive the sample size. This should be followed by the tools or experiments and all other methods used to generate the data. If it is a field experiment, then the number of treatments, replication per treatment, replication size or plot size and the experiment design used should be provided. If survey questionnaires were used, the type of questionnaires used should be provided and a few, preferably two to three important questions pertaining to the objective(s) of the study should also be spelt out. The data generated from the above exercise will constitute primary data. Secondary data is information already published and available in the public domain. Such data is important sometimes to further supplement the primary as well as discussion of the findings. All methods and materials used in this section should be able to fulfil the objectives set out in the study. For this reason, it is important to think and plan this section in more detail. And this section should be written in such a way that readers can repeat the work, if need be.

Results and Discussion

Results and discussion should be combined (though not always) to avoid repetition. Each result or finding should be supported by brief but adequate tables or graphs or pictorial materials, wherever necessary, and more importantly by critical discussion. The discussion could include references and citations in similar fields from past studies, where available.

Students must support, challenge or deny the current theory presented. Grade will be significantly improved in the event that students are able to explain why their data differs (or is the same as) the theory.

This section should constitute Chapter Four. However, raw data or data that are huge should not be placed in this section. They should be appended.

Conclusion(s)

Each statement in this section should be clear, concise, and without elaborative and repetitive discussion. All significant findings must be summarized here, and based on these, suitable conclusion(s) should be arrived at along with identifying further research needs and recommendations at different levels, if appropriate. New ideas should not be at all introduced in this section.

This section should be between 500 to 1000 words including recommendation(s) section, though the latter is optional and should constitute the last formal chapter of a Research Project. If there is more than one conclusion, the section can be written in plurals, e.g., Conclusions.

References

This section should contain a list of all the books, articles, manuals and sources of materials used in the projects. It should be arranged in alphabetical order and fully referenced so that readers, if need be, can find the sources of information with ease. All citations in the text must be reflected in the reference list and vice-versa. Author-date referencing system published by the American Psychological Association, APA 7th Style, should be followed. All references should be carefully cross-checked to ensure that references are correct (To ease referencing writing, software such as EndNote, Mendeley and so on can be used).

Appendices

This section should be used to provide raw data, survey interview questionnaires and other relevant information.

Guidelines and Basic Writing styles

Students are expected to respect the following guidelines for the contents of their Research Project.

A key should be provided for abbreviations and acronyms used. For uncommon abbreviation/acronyms, the term should be given in full at the first instance followed by the abbreviation/acronyms in parenthesis. The final research project should have 12000-14000 words (as per the RUB guidelines) excluding references, appendices, inside title page and table of contents.

All statistical symbols should be typeset in italics (e.g., *t test*, trial *n*, *SEM*, $p < .05$). Parenthesis in statistics should be in these forms; $t(75) = 3.91$; $F(4,231) = 43.63$. Write 'percent' when numerals do not precede or use '%' following a number (e.g., eighty - six percent or 24%).

A space should be maintained between a unit and a figure. For instance, 22 cm, 4 kg etc. However, there are exceptions. For instance, for temperatures expressed in degree centigrade, there is no space between the figure and its unit (5°C). Same is true while expressing in percent, e.g., 7% and not 7 %.

Use "double quotation" marks to give emphasis and use parenthesis and brackets when necessary (the Blood Sugar [BS]). For simple cases slash/virgule can be used as in 4.05 mg/kg and 4.5 nmol. hr⁻¹. mg⁻¹ for compound cases. Numbers below 10 are worded, however, there are exceptions. One such example is the numbers in a series, e.g., "There were 10 girls and 3 boys in the class". Also, in measurement, e.g., 'We added 2 ml of water in the tube'. Zero before decimal fraction is not used in cases where any value expected is not above 1, e.g., $p > .05$, but is used in cases like 0.45 cm. Use symbol for degree, e.g., 30°C. For numbering tables and figures, follow chapter number. For example, the first table in Chapter 3, should be reflected as Table 3.1 or Table 3.2, if that is the second table in Chapter 3. Likewise, for Figure 1 in Chapter 2, use Figure 2.1. For writing table or figure caption, separate the table or figure number with a colon (:), e.g. Figure can be abbreviated, e.g. Fig. 3.2: Weight of frogs fed with different diets.

The caption for a table should always be on the top and for a figure it should always be below the figure or the illustration.

All tables and figures should be referred to in the text, if not such tables and figures become redundant.

Use spaces between equation like $a + b = c$ rather than as in $a+b=c$. Also use a space as in 2 cm x 4 cm instead of 2cmX4 cm.

Commas in numerals are used when number exceeds three digits, e.g., 30,000 people; however, there are exceptions, for instance, in year 1989.

The first paragraph under the heading or subheading should not be indented, while all other succeeding paragraphs should be indented by 0.3' Tab. There should not be any spaces between paragraphs.

For headings like Chapter One (justified centre, bold, 12 font size), Title of the Chapter (justified centre, bold, in different line, e.g. Literature Review). For headings within Chapter use numbered Headings (bold, font size 12), and italicize those subheadings with three number levels, e.g., 3.2.1 *Elements of composting*.

Scientific names follow the International Code of Botanical Nomenclature (ICBN) rules. For instance, *Dalbergia sissoo* (when species is confirmed), *Dalbergia* sp. (when species is not confirmed; note that the "sp.", which is an abbreviation of the English word species; it should not be italicized). When referring to more than one unconfirmed *Dalbergia* species, it can be written as *Dalbergia* spp., and *Dalbergia sissoo* Roxb. for reporting Authority.

Foreign and Latin terms such as *et al.*, which are so common in usage need to be italicized.

Submission

Meeting Deadlines

Students should meet the various deadlines set by the coordinator in the beginning of the semester. "Extension" or additional time for completion of either the proposal or the research project will only be granted in exceptional circumstances by the coordinator in consultation with the concerned supervisors and PL. If duration of "extension" goes beyond one month for whatever reason, including for major revisionwork, then the student will not be eligible to graduate with his/her original cohort. Such case will be reported to the Programme Board Examiners and from there it will be forwarded by the Chair of PBE to the next scheduled meeting of the College Academic Committee.

Research Project Evaluation (1st and 2nd Draft)

The evaluation of the 1st and 2nd draft of the research report should be done by the supervisor. The evaluation process involves provision of feedback to the students and the number of consultation and the time of submission is given in the timeline (ref. module descriptor).

Final Research Project Submission

The students should incorporate all the comments and feedback provided by the supervisors (1st and 2nd draft) and the evaluators (final research project report). And these should be verified by their respective supervisors, who may or may not consult with concerned evaluators for deciding on whether to accept or reject the changes incorporated. Unless the supervisor(s) approves the 2nd draft, the concerned student should not submit the final copy for evaluation. In the event of

research project not being accepted, the concerned supervisor will intimate the same to coordinator for necessary record and action.

If the supervisor approves the changes incorporated in the research report, the concerned student can submit the final research project to the PL for distribution to evaluators. The feedback for the final research project report is dependent on the evaluators unless the research project has major reviews upon which the evaluators must produce evidence for the decision.

All students are expected to produce at least one article from their research project, which will also be graded by their supervisors. The supervisors will intimate their respective PLs and the coordinator, in the event of any research project not being submitted on time.

Major and Minor Revision in Research Project Report

During the Research Project process, a major or a minor revision could come from the evaluator. A revision is a non-formative, quality control approach in the research project whereby:

A major revision implies that the project requires significant changes in the core arguments, methodology, data analysis, or conclusions. The following includes a major revision:

- Rewriting or significantly expanding certain chapters or sections.
- Revising the research methodology.
- Addressing substantial concerns about the thesis's argumentation or interpretation of results.
- Integrating new literature or theoretical frameworks.

The time commitment for major revision ranges from a month to three months.

Meanwhile, a minor revision implies relatively small changes that do not affect the overall structure, content, or conclusions of the thesis. The following includes a minor revision:

- Correcting grammatical errors or typos.
- Clarifying certain points or arguments.
- Adding or updating references.
- Making minor adjustments to data presentation

Students getting major revision in the research project report will not be allowed to sit for oral defense. In case, where a student passes the written report but fails to defend well, the student must re-defend within two weeks.

A student should get 50% of the total marks to pass the oral defense.

Assessment

Research Proposal Assessment Guidelines (15%)

Research Project Proposal will be evaluated by respective supervisors as well the members of the PCM through proposal defense using Form No. 4

Process Evaluation (5%)

The process evaluation consists of 5% which will be evaluated by supervisors by using Form No. 5.

Research Project Assessment (30%)

The research project will be evaluated and graded by two evaluators for 30%. A third evaluator will be appointed if there is 20% difference in the Research Project reports. Form No. 6 will be used for the evaluation.

Research Project Defense (40%)

Students will defend their research project in a public forum with a presentation of about 30 minutes (15 minutes each for presentation and 15 minutes discussion). The defense will be evaluated by internal and external evaluators using Form No. 7.

Journal Article from Research Project (10%)

Students will prepare at least one journal article from the research project. Journal article will be assessed using Form No. 8.

Plagiarism

Plagiarism is a severe form of academic dishonesty where one presents the work of another as if it were one's own without acknowledging the use of that work. Plagiarism will not be tolerated in any form and if any student is found or judged to have plagiarized or indulged in any academic dishonesty, his/her Research Project will be considered as fail. Plagiarism tool Turnitin will be used to check with the permissible limit of 30% for Similarity Index and 10% for AI index. The following are examples of plagiarism:

- verbatim copying of other's work without acknowledgement or paraphrasing of other's work by simply changing a few words or altering the order of presentation without acknowledgement;
- ideas or intellectual data in any form presented as one's own without acknowledging the source(s)
- making significant use of unattributed digital images such as graphs, tables, photographs, etc. taken from test books, articles, films, plays, handouts, internet, or any other source, whether published or unpublished;
- submission of a piece of work which has previously been assessed for a different award or module or at a different institution as if it were new work; and
- use of any material without prior permission of copyright from appropriate authority or owner of the materials used.

Students are required to submit an undertaking stating that she/he did not commit any academic dishonesty or resort to plagiarism in writing the Research Project in the Plagiarism declaration Form provided (Form No.2).

Form No. 1: Certificate

This B.Sc. Degree Research Project on, Can Bhutan Achieve its Goal of Becoming a Fully Organic Agriculture Country? was conducted during the academic year 2020, under the supervision of Prof. Dr. Thubten Sonam, Department of Sustainable Development, and Asso.Prof. Dr. Penjore, Department of Animal Science, College of Natural Resources, Royal University of Bhutan, Lobesa.

Supervisor's name: Prof. Dr. Thubten Sonam

Signature:

Co-supervisor's name: Assoc.Prof. Dr. Penjore

Signature.....

Dean of Academic Affairs: Assoc. Prof. Dr. Tulsi Gurung

Signature:

Form No. 2: Plagiarism Declaration

I declare that this is an original work and I have not committed, to my knowledge, any academic dishonesty or resorted to plagiarism in writing the research project. All the sources of information and assistance received during the course of this study are duly acknowledged.

Student's Signature: Date:

Form No. 3: Research project monitoring format

This format is introduced as modified from the past to monitor the activities undertaken by the project author. The concerned supervisor/s will fix the appropriate datelines for various tasks performed in consultation with the author. In general, the project author and the supervisor/s will meet formally minimum thrice a month during the process of project implementation]

1. Name of student: 2. Programme: 3. Batch: 4. Supervisor: 5. Research Project Title:			
Stage of Research Project	Approved by (Supervisor/Date)	Submitted to	Remarks
Finalization of research topic		Supervisor	
Draft research proposal submission		Supervisor	
Final proposal submission		PL for panel review/proposal defense	
1 st draft research report submission		Supervisor	
Final research report submission		PL for distribution to evaluators	Should be approved by the supervisor.
Article submission		Supervisor	

Form No. 4: Research Proposal Evaluation (15%)

Research Topic:

Author:

Semester:Department:Batch:..... Year:.....

Component	Criteria	Full Marks	Marks obtained
Introduction	Background	5	
	Problem statement		
	Objectives		
Literature Review	Relevant to the topic	2	
	Comprehensive and Credible references		
Methods & Materials	Appropriate research design/ Appropriate methods	2	
	Adequate sample size	3	
	Appropriate tests outline		
	Fulfil study objective/s		
Work Plan	Comprehensive work plan	2	
	Achievable on time		
Overall presentation/format	Comprehensive/Technically sound	1	
Overall Grade		15	

Name of the Supervisor/s:

Signature:

Date:.....

Form No. 5: Research Process evaluation (5%)

Research Project Title:

.....

Name of Student:

Semester: Department: Batch: Year:

Criteria	Full Mark	Marks Obtained
Completion of activities on time as per the workplan	2.5	
Reporting to and interaction with Supervisor/s	2.5	
Total	5.0	

Form No. 6: Research Project Evaluation (30%)

Research project title:.....

Name of Student:

Semester:Department:Batch: Year:.....

Component	Criteria	Full mark	Mark obtained
Abstract	Summary of the whole research project (study objectives, methods & results, main conclusion)	7	
Introduction	Appropriate context	12	
	Logical problem statement		
	Appropriate objective(s)		
Literature Review	Comprehensive literature	20	
	Credible and recent citations		
	Relevant literature (thematic)		
Research Methodology	Appropriate research design/method	20	
	Data Analysis		
	Fulfil study objective		
Results & Discussion	Relevant to study objective(s)	20	
	Logically ordered/presented		
	Adequately illustrated (graphs, tables, figures, models)		
	Each result critically discussed		
Conclusion	Significant results summarized	7	
	Appropriate conclusion(s) drawn		
References	Citation should be listed in reference	7	
	Adequate number of references		
	Correct referencing style		
Overall presentation	Well formatted: inclusion as per the guidelines	7	
Overall Grade		100	

Name of the Examiner:..... Signature:.....

Date:

Form No. 7: Research Project Defense Evaluation (40%)

Research Project Topic:

Author:

Semester: Department: Batch: Year:

Criteria	Full mark	Mark obtained
----------	-----------	---------------

Ability to articulate the rationale of the study; Presence of coherent contents and flow	2	
Ability to design appropriate research tools aligned with the study objectives	4	
Ability to make appropriate presentation of results/findings (tables, figures and illustrations, etc.). Fulfills the study objectives.	10	
Ability to critically discuss results;Ability to respond to questions.	8	
Ability to make reasoned conclusions and recommendations.Identifies further knowledge gaps	5	
Ability to communicate clearly and displays originality	11	
Overall Grade	40	

Name of the Examiner:.....Signature:.....

Date:

Form No. 8: Article Evaluation (10%)

Research Article Topic:.....

Name of student:

Semester:.....Department:.....Batch:.....Year:.....

Component	Criteria	Full mark	Mark obtained
Abstract	Summary of the whole project(study objectives, methods &results, main conclusion)	1	
Introduction	Appropriate context	2	
	Logical problem statement		
	Appropriate objective(s) Relation to existing literature		
	Credible and recent citations		
	Relevant literature (thematic)		
Research Methodology	Appropriate design/method research	2	
	Data Analysis		
	Fulfil study objective		
Results & Discussion	Relevant to study objective(s)	2	
	Logically ordered/presented		
	Adequately illustrated (graphs,tables, figures, models)		
	Each result critically discussed		

Conclusion	Significant results summarized	1	
	Appropriate conclusion(s) drawn		
References	Citation should be listed in Reference	1	
	Adequate number of references		
	Correct referencing style		
Overall presentation	Well formatted, structured as per Manuscript guidelines Grammatically correct language	1	
Overall Grade		10	

Name of the Examiner:.....Signature:.....
Date:

Form No 9: Research project proposal title change and supervisor change and time extension form for an undergraduate student

IMPORTANT:

Student shall ensure that the process is followed as prescribed in the undergraduate research project guidelines and this form is completed, and duly signed before submitting it.

For all types of change requests, signatures of Supervisors and Program Leader (PL) must be provided without which the submitted application form will be considered null and void.

Student Details:

1.	Student Name:	
2.	Student ID:	
3.	Department:	
4.	Research Project Title:	
5.	Email:	
6.	Mobile #:	

Change of research project title:

1.	Title of current research project proposal:	
2.	Date of Approval:	
3.	Name of Supervisor:	
4.	Major change in research project proposal: (a) Previous research project proposal title:	
5.	Major Change in research project proposal: (a) New research project proposal title:	
6.	Department	
7.	Reason for Change:	

Time extension request:

The maximum duration of a BSc Agriculture, Animal Science and Forestry is six (6) months, and extensions are only applicable beyond this point. Extension requests can only be considered if they are accompanied by a completed and signed progress review form and only two months extension can be granted if approved. A progress review is a requirement for students conducting research.

1.	Title of research project proposal:		
2.	Submission of progress review form (date and progress details):		
3.	Academic year of proposed extension (e.g. 2020):		
4.	Extension From (Date):		
5.	Extension To (Date):		
6.	Reason/s for Extension:		

To be completed by Supervisor and the Program Leader (PL)

1.	Name of the Supervisor(s):		
2.	Signature of Supervisor(s):		
3.	Name of PL:		
4.	Signature of PL:		
5.	Date of Submission to DAA:		
6.	Signature of DAA:		

Change of Supervisor

Name of Student:			
I.D. No:			
Degree (BSc):			
Department:			
Requested supervision:	Name of Supervisor:		
	Name of Co-Supervisor:		
With effect from (Date):			
Reason(s) for Change of supervisor:			
Signature of previous supervisor:		Date	
Acceptance by new supervisor (Signature):		Date	
Approval from the Programme Committee		Date	
To be completed by Office of the Dean of Academic Affairs			
Date:			

Appendix 1: Work Plan and Budgeting

Table 1: Sample work plan

		March	April	May	June	July	August	September	October
1	Synopsis writing								
2	Synopsis Approval								
3	Data collection								
4	Data analysis								
5	Thesis Writing								
6	Thesis submission								

Table 2: Sample budgeting

Item	Description	Cost Per	Quantity	Cost
Field tech	20 hrs/week at \$10/hr to process samples and transport samples from field to lab	\$200/week	8 weeks	\$1,600.00
Travel to/from site	257 miles between university and field site	Mileage at \$0.54/mile	514 miles roundtrip	\$277.56
Travel from camp to field sites	2 miles daily, 5 days a week, 8-week field season	Mileage at \$0.54/mile	80	\$43.20
Seine nets	Frabille seine nets for fish capture	\$17.99	3	\$35.98
Fish traps	Netted fish traps	\$25.99	8	\$207.92
Dog food	Bait for fish traps	\$49.98/30 lbs.	1	\$49.98
Total				\$2,214.64

Cover Page Guide

(Written in Times New Roman, font size 14, bold (not block); After logos, start with topic, followed by the author's name, then requirement statement, year of submission and the centre/institution to which the author is affiliated)



Royal University of Bhutan



Habitat Characteristics and Foraging Behaviour of Rufous-necked Hornbill (*Aceros nipalensis* Hodgson) in Jigme Singye Wangchuck National Park, Bhutan

**Karma Sherub
(01150098)**

**Submitted in partial fulfilment of the requirements of
B.Sc. in Forestry**

21 June 2022

**College of Natural Resources
Royal University of Bhutan
Lobesa: Punakha**