





# USM RESEARCH, DEVELOPMENT, AND EXTENSION (RDE)

## MANUAL

Republic of the Philippines
UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Cotabato
9407 Philippines



## The USM Research, Development and Extension (RDE) Manual Revised 2024

Approved by the USM Board of Regents (BOR) by virtue of Resolution No. 106, s. 2023 Revisions approved by the USM Board of Regents by virtue of Resolution No. 119, s. 2024

#### **CONSULTANT**

Francisco Gil N. Garcia

#### **EDITORS**

Ma. Teodora N. Cabasan Debbie Marie B. Verzosa Bryan Lloyd P. Bretaña Glyn G. Magbanua Jennifer E. Sinco

#### **PUBLISHED BY**

Office of the Vice President for Research, Development and Extension and Research Publication Services Office

COPYRIGHT © 2024

For inquiries, requests for copies, comments, and suggestions, please email usmvprde@usm.edu.ph

USM RDE Manual 2024

### **Table of Contents**

1. USM RESEARCH, DEVELOPMENT AND EXTENSION	7
1.1 USM RDE Vision, Mission, and Goals	8
1.2 RDE Structure	8
1.3 RDE Agenda (BOR Resolution No. 69, series 2021)	10
2. RESEARCH, DEVELOPMENT AND EXTENSION PROCESSES	12
2.1 Resources for RDE	12
2.2 Faculty and Researchers RDE Process	17
2.3 Student Research Process	21
2.4 Research Writing	29
3. ETHICS IN RESEARCH	31
3.1 Code of Ethics in Research	31
3.2 Guiding Principles	31
3.3 Elements of Research Ethics	
3.4 Data Privacy Act of 2012	
3.5 Research Ethics Committee (REC)	
3.6. Institutional Animal Care and Use Committee (IACUC) Protocol Review Workflow	
3.7 Institutional Bio-risk Committee	
3.8 Ethics in Academic Writing and Publication	37
4. COMMUNITY ENGAGEMENT AND OUTREACH	44
4.1 The Extension Services Office	44
4.2 Community Engagements	44
4.3 Community Outreach	45
4.4 Student Volunteerism	46
4.5 Collaborations	
4.6 Training Development and Implementation	47
5. INTELLECTUAL PROPERTY	49
5.1 Intellectual Property/ Intellectual Property Rights/ Ownership	49
5.2 Incentives on IP Assets	
5.3 Disclosure and Protection of Intellectual Property	53
5.4 Technology Transfer	53
5.5 Commercialization	54
6. PUBLICATION	58
6.1 University Research Journals	58
6.2 Guidelines for Publication	64
7. POLICIES AND GUIDELINES	65
7.1 Student Theses	65
7.2 Statistical Guidelines	79
7.3 Thesis Honorarium	80
7.4 Publication Incentives	
7.5 Financial Assistance for Publication Fees	
7.6 Research, Development and Extension (RDE) with Limited Funding	82

7.7 Paper Presentation Policy and Guidelines	84
7.8 Classification of R&D programs/projects (DOST, 2020)	86
7.9 Guidelines and Criteria for Paper and Poster Presentation in the in-house Review	86
7.10 Entitlement for the benefits stipulated on the Magna Carta for Scientists, Engineers, Researcher	rs, and
Other Science and Technology (S & T) Personnel	89
7.11 Research Contract	94

### **List of Figures**

Figure 1. The organizational structure of the USM Research, Development and Exter	nsion 9
Figure 2. Flow of the RDE proposal processing for internal funding	18
Figure 3. Processing of undergraduate thesis outline/manuscript	25
Figure 4. Processing of graduate thesis outline/manuscript	28
Figure 5. Training development and implementation flowchart	47
Figure 6. Journal submission flow-chart	63

#### **APPENDICES**

Appendix 1. Quarterly Report and Monitoring Form	96
Appendix 2. Terminal Report Template	100
Appendix 3. Publishable output template	108
Appendix 4. RDE Capsule Proposal Format	110
Appendix 5. RDE Detailed Proposal Format	112
Appendix 6. Workplan	115
Appendix 7. Narrative Report for the Quarterly Monitoring	116
Appendix 8. Application for Research Adviser	
Appendix 9. Application for Change of Thesis Adviser	119
Appendix 10. Application for Research Title	
Appendix 11. Application for Change of Research Title	121
Appendix 12. Application for Thesis Outline Defense	122
Appendix 13. Application for Thesis Manuscript Defense	124
Appendix 14. Outline Defense Comment Form	
Appendix 15. Final Defense Comment Form	
Appendix 16. Application for Outline or Final Defense for Graduate Student	127
Appendix 17. Scoring Sheet for Graduate Student Outline Defense	128
Appendix 18. Thesis Outline Approval Sheet for Masteral Thesis	
Appendix 19. Dissertation Outline Approval Sheet for Doctoral Thesis	130
Appendix 20. Scoring Sheet for Graduate Student Final defense	
Appendix 21. Thesis Manuscript Approval Sheet for Masteral Thesis	132
Appendix 22. Dissertation Approval Sheet for Doctoral Thesis	133
Appendix 23. Certificate of Non-Similarity	
Appendix 24. Application for Ethics Review of a New Protocol	135
Appendix 25. Resubmission Form	
Appendix 26. Application for Ethics Review of Amendments	
Appendix 27. Application for Continuing Review	
Appendix 28. USM IACUC Form 1	
Appendix 29. Co-member's Evaluation Form	
Appendix 30. Application Form for Intent to Publish	
Appendix 31. Requirement for Application for Intent to Publish	146
Appendix 32. Research Contract	147

Administrative Council and forwarded for the confirmation or approval of the Board of Regents, through the University President.

The Research Ethics Committee, Institutional Animal Care and Use Committee (IACUC), and the Institutional Bio-risk Committee (IBC) are independent decision-making bodies monitored by the Office of the Vice President for Research, Development and Extension. They ensure the ethical, humane, and safe conduct of research involving humans, animals, and biohazardous materials, respectively.

The Research Ethics Committee reviews research protocols and their supporting documents, and harmonizes and consolidates ethical scientific research involving humans in the university. IACUC evaluates and approves the Animal Care and Use Program (ACUP) and the protocols of scientific procedures on animal research. The IBC provides policies and practices to prevent unintentional or accidental release of specific biological agents or toxins.

#### **Organizational Structure of Research, Development and Extension**

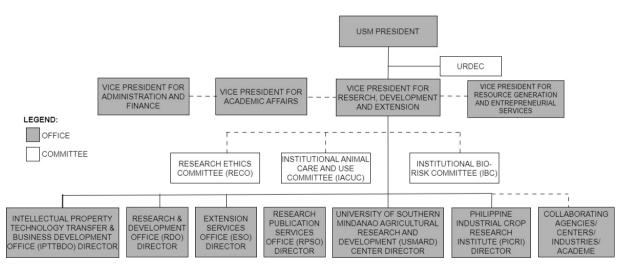


Figure 1. The organizational structure of the USM Research, Development and Extension.

#### 2. RESEARCH, DEVELOPMENT AND EXTENSION PROCESSES

#### 2.1 Resources for RDE

#### 2.1.a Manpower Resources

The USM RDE manpower comes mainly from faculty researchers, full-time researchers, training specialists, college and department research coordinators, college and department extension coordinators, and from the research staff. The load displacement for research and extension coordinators shall be in accordance with policies stipulated in the USM Code. Manpower capabilities are continuously being upgraded through degree-oriented and short-term training.

#### 2.1.a.1 College Research Coordinator

The College Research and Extension Coordinators are endorsed by the College Dean for the approval of the University President while the Department Research Coordinator is endorsed by the Department Chair for the approval of the College Dean. The following qualifications and duties are listed below:

#### Qualifications:

- 1. Must be a permanent faculty member of the college;
- 2. Must be at least Master's degree holder but preferably Doctorate degree holder;
- 3. Must have been a senior adviser for at least 3 years with five (5) advisees graduated;
- 4. Preferably has an on-going or completed research; and
- 5. Preferably has published in a reputable refereed journal.

#### **Duties:**

- 1. Monitors and checks research outlines and final research report in terms of standard format/style and checks if there is duplication of research in the college;
- 2. Keeps one printed copy and e-copy of research report of students and faculty members;
- 3. Maintains an office where students, faculty members and other researchers can make use of available compilations of research in the college;
- 4. Checks completion of information and attachments in RDEIS prior to approval;
- 5. Submits a consolidated list of student research titles to the Research and Development Office;
- 6. Collects all documents necessary for the payment of thesis honorarium from the DRC, and submits these to the RDO for validation, to be forwarded to the OVPRDE;
- 7. Facilitates the alignment of RD activities in the college with the University research agenda;
- 8. Cascades all RD-related information, processes and forms every semester;
- 9. Facilitates the conduct of the College In-house Review;
- 9. Leads the College Research Committee.

#### 2.1.a.2 Department Research Coordinator

#### Qualifications:

- 1. Must be a permanent faculty member of the college;
- 2. Must be at least Master's degree holder; in the event that there is no qualified faculty or in some colleges, the College Research Coordinator may take place and perform the functions of the Department Research Coordinator;
- 3. Preferably has an on-going or completed research; and
- 4. Preferably has published in a reputable refereed journal.

#### **Duties:**

- 1. Gives policy direction on research activities of the students and of the department in line with the policies of the University in relation to quality research;
- 2. Attends the oral defense of thesis outline and manuscript;
- Checks and approves the thesis outline/manuscript of the students, ensuring that quality research is produced and the standard format based on the approved RDE manual is strictly followed;
- 4. Together with the guidance committee, evaluates the thesis outline/manuscript of the student-researchers prior to approval, and monitors the indexing of the thesis;
- 5. Forwards the list of all students and thesis titles of studies involving human participants to the Research Ethics Committee for ethical review;
- 6. Ensures that, whenever applicable, all theses comply with requirements of research ethics, IACUC, and biosafety prior to data collection; and
- 7. Prepares documents necessary for the payment of thesis honorarium, to be forwarded to the CRC.

#### 2.1.a.3 College Extension Coordinator

#### Qualifications:

- 1. Must be a permanent faculty member of the college;
- 2. Must be at least Master's degree holder but preferably Doctorate degree holder;
- 3. Must have attended at least one non-formal basic training courses on Extension Education/Management if not a graduate of any Extension Education courses, and
- 4. Preferably has an on-going or completed community extension project (CEP).

#### **Duties:**

- 1. Monitors and checks CEP proposals submitted from the Departments if there is duplication in the college and together with the College Extension Committee endorses CEP proposals to the ESO for funding;
- 2. Keeps one printed copy and e-copy of RDE Manual, Extension Project Kits, ESO approved forms, CEP proposals, activity reports of students and faculty conducting community engagements (CE) or Outreach, monitoring and accomplishment reports, CEP narrative reports, etc.;
- 3. Maintains an office where students and faculty members can make use of available documents related to Extension;

USM RDE Manual 2024

- 4. Assists the Monitoring and Evaluation Team (MET) during quarterly monitoring of CEPs;
- 5. Monitors submission of narrative reports and reporting of CEPs outputs and accomplishments during the Midyear and Year-end In-house Review; and
- 6. Cascades all RDE-related information, processes and forms every semester.

#### 2.1.a.4 Department Extension Coordinator

#### Qualifications:

- 1. Must be a permanent faculty member of the college;
- 2. Must be at least Master's degree holder; in the event that there is no qualified faculty or in some colleges, the College Extension Coordinator may take place and perform the functions of the Department Extension Coordinator;
- 3. Must have attended at least one basic training course such as Extension 101 on Extension Education/Management if not a graduate of any Extension Education courses; and
- 4. Preferably has an on-going or completed URDEC-recognized community engagement project (CEP);

#### **Duties:**

- 1. Gives policy direction on extension activities of the faculty and students and of the department in line with the policies of the university; and
- 2. Leads in the crafting of the CEP of the Department.

#### 2.1.a.5 Full-time RDE personnel

The following plantilla positions are considered full-time RDE personnel:

- Chief Science Research Specialist
- Supervising Science Research Specialist
- Senior Science Research Specialist
- Science Research Specialist
- Science Aide
- Research Associate
- Research Assistant
- Education Program Specialist
- Training Specialist
- Training Assistant
- Community Development Assistant

#### 2.1.b. Research Workload Equivalence

#### **Faculty Researcher**

A faculty member designated to undertake officially approved research, development and extension, or resource generation activities without honorarium, shall be entitled to the

following workload-credits or teaching assignments equivalent, provided that where a faculty member is designated to undertake more than one research, extension, or resource generation activities at the same time, in one given period, the workload-credits to be granted shall not exceed a total of nine (9) units.

One (1) program (with at least 2 projects)	9 units
One (1) project (with at least 2 studies)	6 units
One (1) study	3 units

#### **Full-time RDE Personnel**

Full-time RDE personnel with Salary Grade (SG) 11 and above should have at least 18 units of load, divided as follows.

	Units		
Functions	sG11/12 e.g., Science Research Specialist 1 / Education Program Specialist 1	sG15/16 e.g, Education Program Specialist 2 / Science Research Specialist 2 / Training Specialist 2	SG 18 and above e.g., Senior Science Research Specialist
RDE Programs/Project/ Study ( <i>without</i> <i>honorarium</i> )	9	12	15
Unit Assignment/ Special Designation	9	6	3

For full-time RDE personnel, the unit workloads for various project roles are defined as follows.

Full-Time RDE personnel as Program/ Project/Study Leader	Units
a. Program Leader (with 1 project leader, 1 research assistant, 1 laborer)	
2 projects	8 units
3 or more projects	10 units
b. Project Leader (with 1 study leader, 1 research assistant, 1 laborer)	
2 studies	6 units
3 or more studies	8 units
c. Project Leader (2 or more studies) with 1 research assistant and/or laborer	6 units

Full-Time RDE personnel as Program/ Project/Study Leader	Units
d. Project Leader (2 or more studies) with no research assistant and no laborer	8 units

Faculty with research or laboratory designation	Units
a. Study Leader with no honorarium (with 1 Research staff and 1 Laborer)	3 units
b. Lab In-charge	6 units

**Note:** All honoraria and/or load displacements are subject to approval and availability of funds.

#### Honorarium/Stipend/Productivity Incentive for Locally Funded Project

- 1. A researcher or faculty shall only be entitled to an honorarium for tasks beyond his/her normal workload.
- 2. For university-funded RDE projects (local research fund), the maximum monthly honorarium shall be as follows, subject to the approved budget:

Project Leader - Php 4,000.00/project / Study Leader - Php 3,000.00/study

- 3. The honorarium shall be released on a quarterly basis. Honorarium can only be released upon submission of approved workplan, Special Order, budget summary, and quarterly monitoring and evaluation report (Appendix 1a for Research, and Appendix 1b for Extension).
- 4. The last quarter of the honoraria for all internally and externally funded research can only be released upon submission of an accomplishment/terminal report (Appendix 2a and 2b for research and extension, respectively) and publishable article (Appendix 3, accepted and certified by the RPSO Director) in a refereed journal. For extension, the publishable article may be in the form of a journal article or news feature article.
- 5. For externally funded RDE projects, the rate of the honorarium shall depend on the approved allocation of the funding institutions.

#### 2.1.c Financial Resources

Possible sources of research funding, appropriate allocation/budgeting and efficient utilization are all very critical in the RDE system. Funding for the RDE activities of the University come from the national fund, local fund from tuition fees, and Production Economic Research Management System (PERMS). Financial support for the USM RDE Programs can also be

generated through grants, donations and collaborations with the government, local and foreign funding institutions.

The USM Administration provides RDE funds through direct allotment to RDE units. The RDE Directors manage the funds and determine the research prioritization based on the research agenda.

#### 2.1.d Linkages

To ensure the success in attaining its research goals and objectives, the University RDE Unit has established and maintained functional linkages with various international, national, and regional/local agencies and institutions, and several local government units for sharing of resources, sharing of technologies and information, providing avenues of manpower development and collaborative research and development activities.

#### 2.2 Faculty and Researchers RDE Process

#### 2.2.a Guidelines for RDE Proposal Processing

The University Research, Development and Extension Committee (URDEC) through the Office of the Vice President for Research, Development and Extension (OVPRDE) facilitates the processing of research proposals for funding (see Figure 2). The URDEC calls for submission of RDE capsule proposals (Appendix 4a and 4b, for research and extension, respectively) for internal funding during the first quarter of each year. The deadline for submission is 2<sup>nd</sup> week of May; evaluation by the URDEC is conducted in June to July of each year.

Results of evaluation shall be communicated to the proponents by July. Project leaders of approved projects shall address comments received during the URDEC evaluation and submit their detailed proposals and indicated attachments in August to the RDE unit concerned. The Director shall check the completeness of documents and ensure that the detailed proposals addressed the comments provided by URDEC. Implementation starts in January of the following year.

The call for proposals from external funding agencies may come on a specific period or anytime during the year. Proponents prepare proposals in accordance with the thrusts and agenda specified by the funding agency.

USM RDE Manual 2024

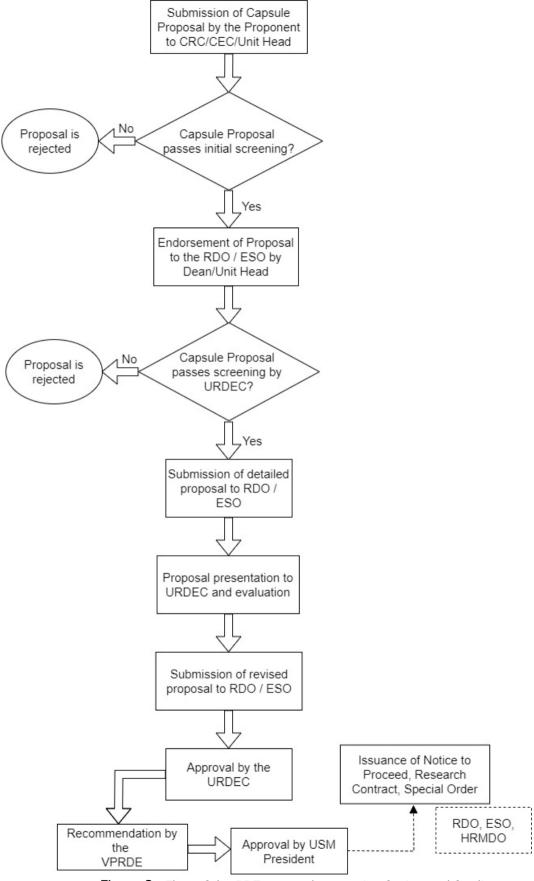


Figure 2. Flow of the RDE proposal processing for internal funding

#### 2.2.a.1 Submission of RDE Proposal for Internal Funding

- 1. Faculty researchers submit one copy of the RDE capsule proposal (Appendix 4a and 4b) to the College Research/Extension Coordinator while full-time researchers submit the proposals to the Head of the Research Unit.
- 2. The academic unit (through the College Research & Extension Committee) or research unit conducts initial assessment of the proposals. Priority is given to proposals aligned to the USM RDE agenda, with potential for publication, technology/product generation, and/or impact. The College Dean, through the CRC/CEC, endorses the proposal.
- 3. The proponent obtains the endorsement from the College Dean and attaches the endorsement to the proposal. The proponent submits printed copies and an e-copy to the RDO or ESO, and emails the softcopy to the RDO (<u>rdo@usm.edu.ph</u>) or ESO (eso@usm.edu.ph). The copies are distributed to the URDEC members for evaluation.
- 4. The URDEC pre-evaluates and checks the duplication of the proposal, including checking for plagiarism and use of artificial intelligence. In case the proposal is rejected, RDO/ESO informs the proponent.
- 5. For selected proposals, the RDO or ESO sends notification to the proponent to submit the detailed proposal (Appendix 5) and workplan (Appendix 6), and invites to present the proposal on the schedule set by the VPRDE.
- 6. The proponent presents the proposal for evaluation to URDEC and technical experts.
- 7. Proponent submits the revised proposal based on the comments of the panel of evaluators to RDO or ESO.

#### 2.2.a.2 Approval of Proposal

- Approved proposals by the URDEC are endorsed to the Office of the President for allocation of fund support.
- The Office of the President issues the notice to proceed (NTP), special order through the RDO/ESO and HRMDO, and signs the research contract.

#### 2.2.a.3 Submission of RDE Proposal for external funding

- Some agencies that support funds for RDE require the initial submission of capsule proposals, and when considered for funding, proponents are requested to submit detailed proposals. Proposal format depends on the requirement of the funding agency.
- The RDE proposal is submitted to the Office of the Vice President for Research and Extension for URDEC review. Proponents are encouraged to submit proposals to the VPRDE at least five working days before the deadline for the call for proposals, to provide time to obtain endorsement from the URDEC.
- The URDEC recommends for the endorsement of the proposal by the University President.
- The University President endorses the proposal.
- The proponent submits the proposal to the funding agency for evaluation.

#### 2.2.a.4 Approval of Proposal

The funding agency informs the proponents of the result of the evaluation.

#### 2.2.b RDE Project Implementation

#### 2.2.b.1 Internal Funding

An approved funded RDE project with local funding will start the implementation on the date indicated in the NTP by the OVPRDE. For research/extension with local funding, a Research/Extension Contract is signed by both parties (researcher/extension worker and USM).

#### 2.2.b.2 External Funding

- For approved externally funded proposals, a draft of the MOA between USM and the funding agency should be submitted to the VPRDE for URDEC review.
- The URDEC submits the MOA to the Legal Division for another review before it will be forwarded to the University President
- For projects with funding coming from other organizations, implementation starts after a memorandum of agreement (MOA) between USM and the funding organization is executed and the research budget has been downloaded.

The program/project shall

- provide a certified true copy of the Memorandum of Agreement for project implementation, approved project proposal, and line-item budget to the OVPRDE.
- prepare request for a Special Order

#### 2.2.b.3 Staff Hiring

For both internally and externally funded projects, the initial phase of project implementation may include hiring of a number of qualified research personnel required by the research, under the guidance of the Human Resources Promotion and Selection Board for Research.

#### 2.2.c RDE Project Monitoring

The RDE Directors and the VPRDE monitor research projects in the financial and technical areas. Monitoring is conducted through the technical reports submitted by the R&D project leader as follows:

- The project or study or component leader prepares the quarterly report composed of the workplan (Appendix 6), narrative report (Appendix 7), and quarterly report (Appendix 1a and 1b) of the accomplishment of the quarter. In addition to these, the Special Order and Budget Summary are attached if an honorarium will be claimed.
- These documents will be submitted to the College Research/Extension Coordinator who will pre-evaluate and record the project accomplishment. The College Research/

Extension Coordinator will countersign in the narrative report (Appendix 7), and quarterly report (Appendix 1). For full-time researchers, the documents are submitted directly to the Research Unit concerned.

- The documents are forwarded to the RDO/ESO Director for evaluation. If the project is under ESO, the evaluation shall be done by the Director and the Monitoring and Evaluation Team (MET). If the projects are under the USMARD Center or PICRI, the documents are first recorded and pre-checked by RDO then forwarded to the respective Directors for evaluation and approval.
- The VPRDE further reviews the document and signs the complete quarterly monitoring report (Appendix 1a, 1b and 7).
- The validation of the progress of RDE projects is through the attached data and documentation of the activity. The URDEC may conduct a site, lab or field visit anytime during the implementation of the project to assess the progress of research project and identify resources needs and concerns for appropriate action.

#### 2.2.d RDE Project Evaluation

- Midyear and Year-end In-house Review shall be conducted to monitor and evaluate all on-going and completed RDE projects and to identify technologies and other relevant information generated.
- The project or study or component leader submits four copies of the narrative report to the RDO or ESO, to be distributed to the panel of evaluators.
- All RDE projects are evaluated by the technical evaluation committee composed of selected evaluators.
- Proponents of completed projects are required to submit the terminal report (Appendix
   2) and publishable output (Appendix 3) or IP applications after the completion of the program/project.
- The RDO Director collects IP claims from researchers and forwards these to the IPTTBDO.

#### 2.3 Student Research Process

A thesis is a component of a course program - may it be a Bachelor's degree, Master's Degree or Doctoral Degree.

A thesis, whether submitted for a Bachelor's, Master's, or Doctor's degree are expected to be evidence-based, written in academic language, with proper citations to the scholarly literature. However, they may vary in terms of scope and depth (Joyner et al., 2018). In the University of Southern Mindanao, the following guide applies.

	Bachelor's Thesis	Master's Thesis	Dissertation
Scope	The results of the study are important in at least, the local	The results of the study have implications outside the locale of the study.	The results of the study have implications to <i>theory</i> . Even when the study is carried out in

	context.		a particular time and place, the results must have a significant contribution to the field in some way, such as by developing or refining a theory, extending a research methodology, or shifting prevailing perspectives (Joyner et al., 2018).
Depth	Investigations that utilize basic analytical tools (e.g., descriptive statistics, basic inferential statistics, basic thematic analysis) and adapted surveys are allowed.	Investigations that utilize basic analytical tools (e.g., descriptive statistics, basic inferential statistics, basic thematic analysis) and adapted surveys are allowed but not sufficient.	Investigations must be carried out using a carefully designed research instrument appropriate to the research problem under study (going beyond the use of ready-made ones). Further, these should include a depth of analysis that is necessary for theory development.

#### Reference:

Joyner, R. L., Rouse, W. A., & Glatthorn, A. A. (2018). Writing the winning dissertation: A step-by-step guide. Corwin Press.

#### **Thesis Templates**

As a guide to this process, thesis templates are available at the USM RDE website. The templates are descriptive and suggestive of the nature and purpose of the various components of a thesis or manuscript. The inclusion of the components suggested herein needs careful and thoughtful consideration, and consultation by the student/candidate and the supervisor/adviser.

#### Recording and Indexing of Thesis Outline/Manuscript

- 1. Indexing and recording of thesis outline and manuscript shall be facilitated by the respective Colleges using the Research, Development and Extension Indexing System (RDEIS).
- 2. Once the research title and outline are defended and approved, information such as thesis title, academic year and semester as well as plagiarism and AI check result shall be encoded in the RDEIS. For defended thesis manuscript, information such as thesis title, academic year and semester, plagiarism and AI check result and abstract shall be encoded, and the fully signed thesis is uploaded to the RDEIS by the adviser.
- 3. When the outline/manuscript is successfully defended and revised based on the suggestions of the panel, a hardcopy of the thesis with attached filled-up research forms duly signed shall be bound and processed.
- 4. College Research Coordinators (CRCs) shall approve the thesis outline/manuscript in the RDEIS. The CRC shall provide the student with the thesis study number.
- 5. The CRC shall collect from the student-researcher a softcopy or electronic copy of an outline/manuscript and for record and storage purposes.
- 6. RDO shall ensure that thesis outlines/manuscripts shall be submitted, recorded and indexed on time through circulation of memorandum and imposition of deadline in the system.

7. Consolidated reports at the end of manuscript indexing period from the College Research Coordinator shall be submitted by RDO to the VPRDE for the University Academic Council as part of the verification of the list of graduating students.

#### 2.3.a Undergraduate Thesis

#### **Application for Thesis Adviser**

- A student seeking to be advised/guided by a faculty of a specific unit for his/her thesis shall submit an application for research adviser (Appendix 8).
- Change of Adviser shall only be allowed on extreme cases as advisers going on leave (study leave), retiring, or becoming incapacitated due to sickness. In such instances, a student shall be allowed to apply for change of thesis adviser (Appendix 9) provided that the previous adviser acknowledges his/her inability to perform the roles of an adviser due to any of the reasons stated above.

#### **Application for Research Title**

- A student who conceptualized a research problem shall submit his/her title to the adviser for review. The Department Research Coordinator shall verify that the title is not a duplication and is within the thematic area of USM. Once verified, the student shall apply for research title approval (Appendix 10).
- Thesis title oral defense shall be conducted only if the adviser deems it necessary.
- In the event that a research title needs to be changed, the student shall re-apply for a new research title (Appendix 11), to allow the RDO to implement the change in RDEIS.

#### Thesis Outline/Manuscript Defense and Conduct of Thesis

- The purpose of thesis defense is to provide an opportunity:
  - o For the examining committee to discuss with the student the merits of his research;
  - o For scholarly discussion;
  - o To help improve the quality of the manuscript;
  - To share new research with the academic community;
  - To assess the student's ability to express him/herself orally in an academic forum;
     and
  - To provide evidence through the written document of the student's research skills and writing ability.
- Students shall apply for outline/manuscript defense and shall fill out the application form for defense (Appendix 12 and Appendix 13) only after his/ her adviser's go-signal before the conduct of defense. Schedule of the student's thesis defense shall be approved first by his/her thesis guidance committee. Thesis defense shall not be allowed to proceed/commence unless the thesis adviser, department research coordinator, and quidance committee are present.
- A statistician may sit during the outline/manuscript defense only if the adviser deems it necessary for that particular research.
- A modified or researcher-made social research instrument must undergo validity and reliability testing.

- For studies involving humans, animals, or biohazards, the student shall secure the necessary approvals from the RECO, IACUC, or IBC, respectively. The Department Research Coordinator (DRC) shall send a list of all thesis (with student name and titles) to the RECO, and indicate which of those theses involve human participants.
- A student shall only be allowed to start data collection once the approval thesis outline
  has been signed and approved by the research coordinator and the college dean, and
  indexed in the Research Development and Extension Indexing System (RDEIS), a digital
  platform available at https://rdeis.usm.edu.ph/v2 or at the USM RDE website.
- The thesis outline and final manuscript cannot be defended in the same semester.
- Data analysis, specifically statistical analysis, shall be done by the student-researcher.
   He/she may opt to consult a statistician only when necessary and with the consent of his/her adviser.
- To ensure timely processing of thesis outline/manuscript from application of title to indexing of thesis, all transactions shall be recorded by the DRC.
- For major corrections in the content of thesis outline/manuscript, the Advisory Committee shall suggest that the paper be returned to the student through the adviser for revision and improvement.
- For minor corrections in the content of thesis outline/manuscript, the Advisory Committee shall write the observed points for revision on the corresponding Comment Form (Appendix 14 and Appendix 15) which shall be submitted to DRC for filing and consolidation. Copy of this form will be given to the student through the adviser.
- The thesis adviser shall upload the final version of the thesis to the university repository, currently the RDEIS, or to similar platforms that will facilitate the search, retrieval, and protection of the work. The DRC shall check the uploaded files prior to approving the research in RDEIS.

#### **Conduct of Off-Campus Thesis**

- A student who needs to conduct his/her thesis outside the campus shall write a letter of
  intent to the concerned agency stating the title, the objectives, and the reasons of the
  study. The said letter shall be endorsed by the adviser and shall be noted by the dean
  and the RDO.
- In the case where the student will conduct his/her thesis in another university, he/she shall seek endorsement from the USM president.

Figure 3 summarizes the sequence to be followed by the student-researcher when he/she is ready to process the outline/manuscript for submission.

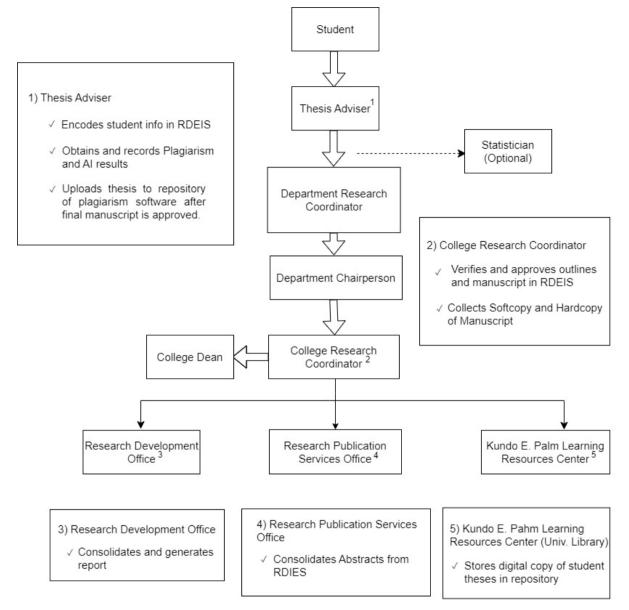


Figure 3. Processing of undergraduate thesis outline/manuscript

#### 2.3.b Graduate Thesis or Dissertation

#### **Outline Defense**

- Thesis outline defense shall be mandatory and shall only be conducted after the thesis student has passed the comprehensive exam.
- A student who has passed the comprehensive exam and intends to proceed with the
  thesis shall approach the program head to discuss his/her research interest. The
  program head, in consultation with the thesis student, will assign a thesis adviser and
  the Guidance Committee.
- The graduate student shall fill out the Application for Outline Defense (Appendix 16) and attach a copy of the thesis outline. The student shall submit 1 printed copy to the Graduate School Office and email a softcopy to <a href="mailto:gradschool@usm.edu.ph">gradschool@usm.edu.ph</a>.

- The Graduate School Dean will convene the Graduate School Research Committee (GSRC) to review the thesis outline. The Committee shall consist of the Graduate School Dean, Graduate School Research Coordinator, the thesis adviser, and a representative from the Research and Development Office. The Committee will review the thesis outline and determine whether the outline is suitable for defense.
- The date of outline defense shall be scheduled at least 5 days (for Master's students) and 10 days (for Doctoral students) after submission of the (a) Application for Outline Defense to the Graduate School and (b) copies of the thesis outline to the Graduate School Research Committee.
- Only Master's Thesis and Dissertation students who have secured complete signatures in the Application for Outline Defense shall be allowed to defend.
- The comments of the Guidance Committee shall be written on the comment form (Appendix 14). Each member of the Guidance Committee shall also complete the scoring sheet for outline defense (Appendix 17).
- After the defense, the thesis student shall revise the outline manuscript to address the comments of the Guidance Committee.
- The thesis student shall submit the revised outline to his/her thesis adviser for plagiarism and AI analysis using the University-specified plagiarism and AI detection software. The similarity index should not exceed 10%, excluding preliminary pages, appendices, and references.
- The thesis student shall show the Digital Receipt generated by the plagiarism and AI detection software to the Graduate School Research Coordinator.
- The thesis student shall prepare one softbound copy of the thesis outline, including the preliminary pages and approval sheet (Appendix 18 and 19 for Masters and Doctoral students, respectively).
- The student shall have the softbound copy of the revised outline signed by the Guidance Committee, Graduate School Research Coordinator, and Graduate School Dean.
- For studies involving humans, animals, or biohazards, the student shall secure the necessary approvals from the RECO, IACUC, or IBC, respectively.
- Once the thesis outline is defended and approved, the major adviser shall encode information such as thesis title, academic year and semester, and plagiarism and AI check results in the RDEIS through <a href="https://rdeis.usm.edu.ph/v2">https://rdeis.usm.edu.ph/v2</a> or the USM RDE website.
- The Graduate School Research Coordinator shall check all information encoded in the RDEIS, and approve the outline if all data required by RDEIS is encoded.
- After submission of the indexed outline to the Graduate School, the thesis student may be allowed to conduct the study.
- Data analysis, specifically statistical analysis, shall be done by the thesis student.
   He/she may opt to consult a statistician only when necessary and with the consent of his/her adviser.
- Consultations with English critics are discouraged so that graduate students develop independence and self-reliance.

#### **Thesis Manuscript Defense**

- The outline and final defense must not take place in the same semester. The final defense must be done before the maximum residency allowed for the graduate student.
- The student shall fill out the Application for Final Defense (Appendix 16) and attach a copy of the thesis manuscript. The student shall submit one (1) printed copy to the Graduate School Office and email a softcopy to gradschool@usm.edu.ph.
- The Graduate School Dean will convene the Graduate School Research Committee (GSRC) to review the thesis manuscript to determine whether the outline is suitable for defense.
- The date of final defense shall be scheduled at least 5 days (for Master's students) and 10 days (for Doctoral students) after submission of the (a) Application for Final Defense to the Graduate School and (b) copies of the thesis manuscript to the Graduate School Research Committee.
- Only students who have secured complete signatures in the Application for Final Defense shall be allowed to defend their Master's Thesis and Dissertation. The comments of the Guidance Committee shall be recorded on the comment form (Appendix 15). Each member of the Guidance Committee shall complete the scoring sheet for final defense (Appendix 20).
- Revisions in the manuscript shall be done by the thesis student based on the comments by the Guidance Committee.
- The revised final manuscript shall be submitted by the student to his/her adviser for plagiarism and AI analysis by using the University-specified plagiarism and AI detection software. The similarity index should not exceed 10%, excluding references.
- The thesis student shall show the Digital Receipt generated by the plagiarism and AI detection software to the Graduate School Research Coordinator.
- The thesis student shall submit a copy of the final manuscript to the Guidance Committee for checking. Upon receiving verbal approval, the thesis student shall prepare two (2) hardbound copies, including signed preliminary pages and the approval sheet (Appendix 21 and 22 for Master's and Doctoral students, respectively). One hard copy each shall be submitted to the GS library and the Main Library.
- Once the manuscript is defended and approved, the major adviser shall encode information such as thesis title, academic year and semester, and plagiarism check result in the RDEIS through <a href="https://rdeis.usm.edu.ph/v2">https://rdeis.usm.edu.ph/v2</a> or the USM RDE website. The major adviser shall also attach a PDF copy of the full manuscript in RDEIS.
- The Graduate School Research Coordinator shall check all information and files uploaded to the RDEIS, and approve the manuscript if all information and files are complete.

Figure 4 summarizes the process from application for outline/thesis defense to indexing.

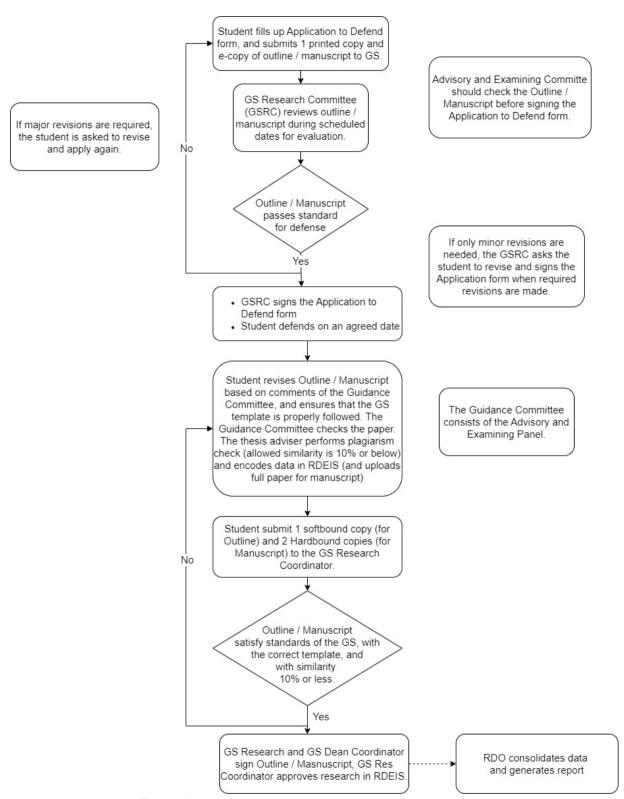


Figure 4. Processing of graduate thesis outline/manuscript

#### 2.4 Research Writing

Research involves writing, from the proposal stage up to the final output such as a thesis manuscript, terminal report, or research publication. In all these cases, researchers are expected to produce original work.

#### **Plagiarism Check and Artificial Intelligence Detection**

Text-matching tools and artificial intelligence (AI) detection software provide an effective way to detect potential plagiarism and AI use based on exact matches with published and unpublished sources. USM shall subject all thesis outlines, manuscripts, dissertations, and other research reports (quarterly narrative progress reports and terminal reports) to plagiarism and AI detection using software subscribed to by the university. Plagiarism and AI detection of outline, manuscript or dissertation shall follow the existing USM Plagiarism Policy and Guidelines (see Section 3.5.h).

Originality and proper referencing of theses and research reports are overseen by the RDO Director and thesis advisers, respectively. Particular guidelines for student theses are as follows.

- The major adviser uploads the student outline and manuscript in the official text-matching software used by the University, and chooses "No repository" so that the submission will not be stored in the database. References and appendices shall not be uploaded to the software.
- 2. The major adviser shall check for the following:
  - a. the overall similarity does not exceed 15% for undergraduate students and 10% for graduate students;
  - b. no key ideas central to the thesis (e.g., results) are plagiarized;
  - c. content is not generated via artificial intelligence;
  - d. no full sentences or paragraphs are entirely lifted from other sources;
  - e. the student only cites references that he or she has actually read (note that an in-text citation marked by the text-matching software indicates that the citation was just copied from another source and the student has not read that source);
  - f. the paragraphs are written in a clear and cohesive manner, with appropriate references to the scholarly literature.
  - g. references are updated (i.e., to include references published within the last five years). Paragraphs that cite older references shall be followed by paragraphs that discuss how older studies have since developed within the past five years.
- 3. If any part of 2a through 2d is not satisfied, then the adviser returns the manuscript to the student and provides additional guidance as needed.
- 4. The major adviser shall sign the manuscript after verifying that parts 2a through 2d are all satisfied, and that the content passes the standards of an undergraduate thesis.
- 5. The student certifies that their paper is original (Appendix 23) and submits this form to the college research coordinator (CRC).

- 6. The CRC shall sign the thesis outline/manuscript after confirming that parts 2a through 2d are satisfied. If not, the CRC shall return the outline/manuscript to the thesis adviser for further revisions.
- 7. After the CRC approves the manuscript, the major adviser shall upload the final manuscript, excluding preliminary pages and appendices, to the text-matching software and choose to add the manuscript to the repository. This will allow the text-matching software to store the final manuscript in the database so that it can be compared with future submissions.