



USM RESEARCH, DEVELOPMENT, AND EXTENSION (RDE)

MANUAL

2023

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



The USM Research, Development and Extension (RDE) Manual Revised 2023

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WRITERS AND CONTRIBUTORS

Angelo R. Agduma Edward A. Barlaan Ma. Teodora N. Cabasan Mary Joy S. Cañolas Roselyn M. Clemen Pia Amabelle M. Flores Efren E. Magulama Marianne I. Meriales
Abubakar A. Murray
Lydia C. Pascual
Krizler C. Tanalgo
Jan Clyden B. Tenorio
Debbie Marie B. Verzosa

CONSULTANT

Francisco Gil N. Garcia

EDITORS

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

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PREFACE

This manual is a general reference on various guidelines and procedures in the conduct of research, development and extension (RDE) and its related activities in the University of Southern Mindanao (USM). As a premier university, USM is committed to providing quality RDE, a vital component of our institution's progress. This RDE Manual is a practical and comprehensive resource for researchers, extensionists and students to carry out research, development, and extension activities efficiently and effectively in a manner that promotes productivity, quality, and innovation.

The RDE manual is a product of process documentation that covers various aspects of RDE including proposal development, planning, and implementation of research and development projects. The manual is intended for use by either new or experienced researchers, undergraduate and graduate students. It was developed to serve as a handy reference in developing, writing and publishing or even patenting ones' scientific work. It provides guidance on the step-by-step procedure, related mandates, proper ethics and other applicable rules and information beneficial and essential in coming up with the best RDE outputs. This revised RDE manual is relevant to the needs of our institution and gives direction to ensure accuracy, relevance, compliance, consistency, and effectiveness in carrying out R&D activities.

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1. USM RESEARCH, DEVELOPMENT AND EXTENSION

The University of Southern Mindanao is inclined to the development of products, technologies, innovations and discoveries of new ideas and information. This is facilitated through research engagements of faculty, full-time researchers and undergraduate/graduate students. The activity is geared towards providing products and services to the end-consumers and other stakeholders of the University from various fields.

The University envisions upholding its status of excellence in Research, Development and Extension (RDE) as one of its major functions. Through its RDE function, the University shall be the forerunner of progressive research projects and innovation in response to the needs of time. This is by means of continuing to be the pioneer source of technology and information that are on track towards poverty reduction, food security, and global competitiveness and likewise, for cohesive and sustainable development among its multi-socio-cultural clienteles. RDE shall be implemented in consonance with the University's vision, mission, and objectives, and in support of the national and regional development thrusts and the United Nations Sustainable Development Goals (SDGs).

Research and development outputs must be disseminated through extension. The University shall develop, package and eventually extend appropriate technologies and other useful information to its service area in cooperation with the different units of the institution. This is materialized through seminars, training, community engagements and various approaches. In addition, as part of its information dissemination, the University also promotes publication and patenting of research outputs and provides subsequent incentives.

This manual will serve as a guide on RDE processes to streamline the RDE function of the University and to put its operation in an orderly and synchronized system.

Objectives

Generally, this RDE Manual will provide policies and guidelines to put into operation a system that will undertake multi-disciplinary approaches for RDE activities. This will give directions to ensure that technologies and information generated can address the prevailing concerns and issues in the local, regional and national levels for sustainable development.

Specifically, this manual aims to:

- 1. provide information about the RDE services in the university;
- 2. provide directions for processing of RDE proposals, and monitoring and evaluation of the progress of RDE projects;
- 3. create mechanisms to come up with quality standard of RDE activities in the university; and
- 4. streamline coordination and collaboration of all the RDE units, Colleges, and Institutes in RDE endeavors.

1.1 USM RDE Vision, Mission, and Goals

Vision

USM envisions upholding its status of excellence in Research, Development and Extension by continuing to be the pioneer source of technology and information that are on track towards poverty reduction, food security, and global competitiveness for cohesive and sustainable development among its multi-socio-cultural clientele.

Mission

To put into operation a system to undertake a multi-disciplinary approach for RDE activities to ensure that technologies and information generated can address the prevailing concerns and issues in the local, regional and national levels for sustainable development.

Goals

- improve the system with scientific excellence through collaborative and interdisciplinary RDE activities that are anchored on the University's vision/mission;
- conduct research and generate technologies that could provide solutions and address the local, regional and national concerns and issues;
- provide a mechanism to ensure that research results be effectively and efficiently delivered to the clients for utilization and commercialization; and
- build up resource generation facilities for continuous and sustainable RDE programs that are geared towards ensuring food security, global competitiveness, socio-cultural responsiveness that eventually improve the quality of life of the clientele.

1.2 RDE Structure

The University Research, Development and Extension Committee (URDEC), Research Ethics Committee, Institutional Animal Care and Use Committee (IACUC), and the Biosafety Committee are directly under the Office of the President (Figure 1).

URDEC formulates, reviews, and recommends policies, guidelines, rules, and regulations governing research, development and extension services for endorsement by the Administrative Council and forwarded for the confirmation or approval of the Board of Regents, through the University President. 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 Biosafety Committee provides policies and practices to prevent unintentional or accidental release of specific biological agents or toxins. The University has several units serving as its RDE arms; namely the Research and Development Office (RDO), Extension Services Office (ESO), Research Publication Services Office (RPSO), University of Southern Mindanao Agricultural Research and Development (USMARD) Center, Philippine Industrial Crops Research Institute (PICRI), the Intellectual Property Technology Transfer and Business Development Center (ITTTBDO), and the collaborating agencies, industries, and other research centers.

Revised Organizational Structure of Research, Development and Extension

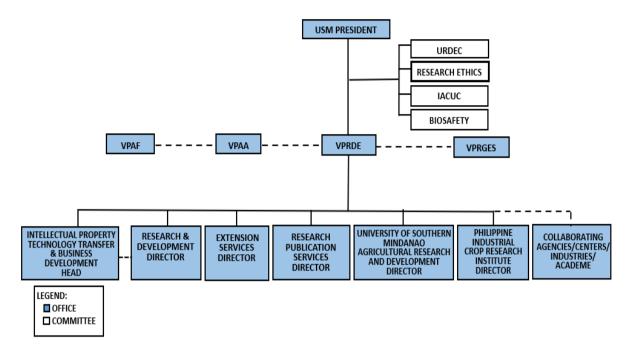


Figure 1. The organizational structure of the USM Research, Development and Extension.

1.3 RDE Agenda (BOR Resolution No. 69, series 2021)

In support to the national agenda and in consultations with stakeholders, the RDE themes are as follows:

| RDE Themes | RDE Priority Areas |
|--|---|
| Quality Learning, Skills Development, and Literacy | Innovative teaching strategies; development and evaluation of functional education materials and modalities, and teaching strategies/approaches, motivation, and engagement; school climate; school and knowledge management; special education; remedial education; curriculum development and implementation; alternative learning system; assessment studies; soft skills; practical skills; adult education; language literacy; numerical literacy; data literacy; computer literacy; international studies; tracer studies; livelihood programs;; capacity building; capability building |
| Social Development, and Strong Institutions | Gender and development GAD; peace initiatives; community development; human security; justice; public policy and legislations; social rehabilitation; governance; organizational studies; behavioral studies; social institutions; ethics and public accountability; programs/project assessment; community needs assessment and interventions; partnerships and linkages; technology adoption; Institutional development; upgrading of laboratory and lecture facilities |

| RDE Themes | RDE Priority Areas |
|--|---|
| Preservation of Culture | Multicultural studies; educational materials for IPs; indigenous knowledge systems and practices; development of materials for cultural knowledge and promotion; arts; language and literature studies; traditional dance, sports and music; halal studies |
| Environmental Protection, Conservation, and Risk Reduction | Environment rehabilitation studies; biodiversity; climate change adaptation; risk, hazard and mitigation; biosafety; natural resources conservation and management; bioremediation; flood control; waste management; ecological preservation and care; environmental impact assessment; tourism; agroecology; natural farming |
| Food Security and Poverty Reduction | Agricultural and fisheries research; biotechnology; innovations; quality food product development; technology development; halal food production; sustainable production; responsible consumption; organic agriculture; food testing; smart agriculture; precision farming; farm machineries; post-harvest facilities; vertical farming; indigenous food; food tourism; development of new breeds and varieties |
| Good Health and Wellbeing | Nutrition; nutraceuticals; sports, physical education; physical fitness; sports psychology; health resiliency; psycho-social health; medical and medicinal studies; hygiene and sanitation; functional foods; food and water quality and safety; mental and emotional health; therapy; coping mechanism; preventive measures; emerging diseases; health management; traditional and alternative medicine; community health; risk assessment and mitigation; health informatics, regenerative medicine, emergency response medicine |
| Innovations in Science, Engineering, and Technology | Innovations and futures thinking; product and technology development; energy; materials science; nanotechnologies; robotics; artificial intelligence; internet of things; Science, Engineering, Communication, and Technologies (SECT) 4.0; biotechnology and OMIC technologies; inventions and discoveries; basic research; information technologies; electronics; drug discovery; mathematics; emerging technologies; fabrication; transport system; waste management; infrastructure; water systems; simulation studies; industrial and allied technology, Data Science and Analytics, GIS, Remote sensing, machine learning; quantum technology; smart cities |
| Sustainable Entrepreneurship and Management | Economics; micro and macro scale business; product development; marketing; commercialization; networking; franchising; financial management; business feasibility studies; risk and opportunities; value adding; value chain analysis; organizational management; quality service assessment; human resource management; production management; sustainable cooperative studies; Entrepreneurial studies |

2. RESEARCH, DEVELOPMENT AND EXTENSION PROCESSES

2.1 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. Please refer to Sections 3.5.h and 3.5.i for guidelines regarding plagiarism and the use of artificial intelligence in writing.

2.2 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.

As a guide to this process, the templates herein provided 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.

2.2.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 2).
- 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 3) 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 and verification by the College Research Committee.
- The College Research Committee for undergraduate thesis shall review and verify proposed titles of the students if there has been a duplication and repetition of previous studies and if the proposed title is within the thematic area of USM.
- Once verified, the student shall apply for research title approval (Appendix 4). Thesis title oral defense shall be conducted if the department 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 5), 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;
 - For scholarly discussion;
 - 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;
 - 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 6 and Appendix 7) 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 guidance 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.
- The Department Research Coordinator (DRC) checks the research ethics approval, data privacy notice, informed consent and assent forms, and Institutional Animal Care and Use Committee (IACUC) permits as deemed necessary.
- A student shall only be allowed to start data collection once the thesis outline is approved. The adviser shall encode the thesis outline 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.
- A student shall only be allowed to start data collection once the approval thesis outline
 has been signed by the research coordinator and the college dean. Further, the student
 should ensure the title of the approved outline has been approved 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 8 and Appendix 9) which shall be submitted to DRC for filing and consolidation. Copy of this form will be given to the student through the adviser.
- The college research coordinator 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.

Conduct of Off-Campus Thesis

- A student that needs to conduct his/her thesis outside the campus, he/she 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 president.

Figure 2 summarizes the sequence to be followed by the student-researcher when he/she is ready to process the outline/manuscript for submission.

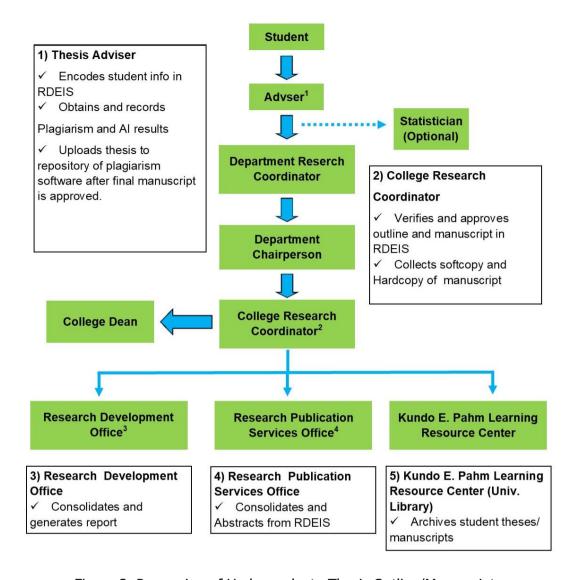


Figure 2. Processing of Undergraduate Thesis Outline/Manuscript

2.2.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.
- The thesis student should approach the program head for the intention to defend. 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 10)
 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 gradschool@usm.edu.ph.
- The Graduate School Dean will identify members of 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 8). Each member of the Guidance Committee shall also complete the scoring sheet for outline defense (Appendix 11).
- 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 analysis and AI using the University-specified plagiarism and AI detection software. The similarity index should not exceed 20%, 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 13 and 14 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.
- 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 result in the RDEIS through https://rdeis.usm.edu.ph/v2 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.
- Only after submission of the indexed outline to the Graduate School will the thesis student 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 final defense must take place at least one semester after the semester when the outline was defended. (or: The outline and final defense must not take place in the same semester.)

- The student shall fill out the Application for Final Defense (Appendix 10) 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 identify members of the Graduate School Research Committee (GSRC) to review the thesis manuscript. 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 manuscript and determine whether the manuscript is ready 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 9). Each member of the Guidance Committee shall complete the scoring sheet for final defense (Appendix 12).
- 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 20%, 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 15 and 16 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 https://rdeis.usm.edu.ph/v2 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 3 summarizes the process from application for outline/thesis defense to indexing.

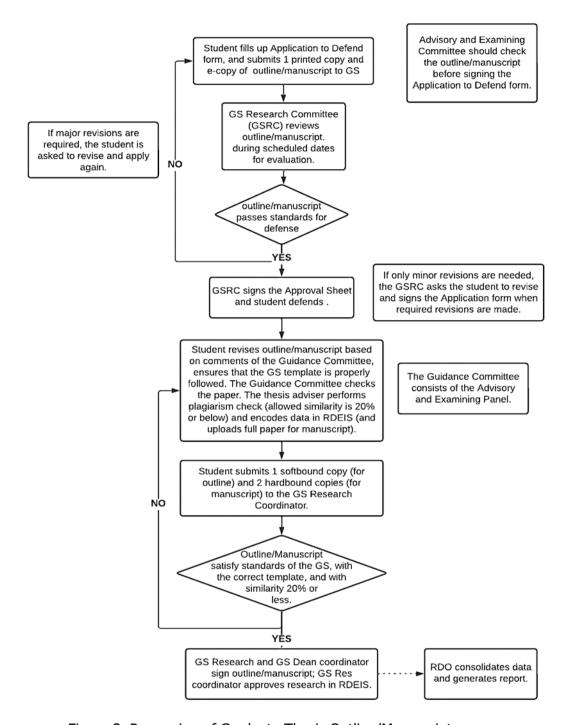


Figure 3. Processing of Graduate Thesis Outline/Manuscript

2.3 Resources for RDE

2.3.a Manpower Resources

The USM RDE manpower comes mainly from faculty researchers, full-time researchers, college and department research coordinators, college and department extension coordinators, and from the research staff. Manpower capabilities are continuously being upgraded through degree-oriented and short-term training.

2.3.a.1 College Research Coordinator

Qualifications:

- 1. Must be at least Master's degree holder but preferably Doctorate degree holder;
- 2. Must have been a senior adviser for at least 3 years with five (5) advisees graduated;
- 3. Preferably has an on-going or completed research; and
- 4. 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 copies 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. Approves the indexed thesis;
- 5. Reports student research output during the Midyear and Year-end In-house Review;
- 6. Facilitates the alignment of RD activities in the college with the University research agenda;
- 7. Cascades all RD-related information, processes and forms every semester;
- 8. Assists in the monitoring of faculty RD projects, including REC;
- 9. Leads the College Research Committee.

2.3.a.2 Department Research Coordinator

Qualifications:

- 1. 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;
- 2. Preferably has an on-going or completed research; and
- 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;

- 3. Checks and approves the thesis outline/manuscript of the students, ensuring that a standard format of the university is strictly followed (based on the approved undergraduate research handbook); and
- 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.

2.3.a.3 College Extension Coordinator

Qualifications:

- 1. Must be at least Master's degree holder but preferably Doctorate degree holder;
- 2. 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
- 3. Preferably has an on-going or completed community extension project (CEP).

Duties:

- 1. Monitor 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 copies of Extension Manual, 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;
- 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;
- 6. Cascades all RDE-related information, processes and forms every semester.

2.3.a.4 Department Extension Coordinator

Qualifications:

- 1. 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;
- 2. Must have attended at least one non-formal basic training courses on Extension Education/Management if not a graduate of any Extension Education courses;
- 3. 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;
- 2. lead in the crafting of the CEP of the Department;

2.3.a.5 Full-time researchers

The university has the following full-time RDE personnel:

- Senior Science Research Specialist (SSRS)
- Science Research Specialist 2 (SRS 2)
- Education Program Specialist 2 (EPS 2)
- Education Program Specialist 1 (EPS 1)

2.3.b. Research Workload Arrangement

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:

a) One (1) program 9 units b) One (1) project 6 units c) One (1) study 3 units

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.

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

| Full-Time Researcher as Program/Project/Study Leader | Units | Personnel involved |
|---|----------|--|
| a. Program Leader (2-3 projects) 2 projects – 8 units 3 projects – 10 units | 12 units | 1 Project leader 1 Research assistant 1 Laborer |
| b. Project Leader (2-3 studies) 2 studies – 6 units 3 studies – 8 units | 6 units | 1 Study leader 1 Research assistant 1 Laborer |
| c. Project Leader | 6 units | no Study leader with 1 Research assistant with Laborer |
| d. Project Leader | 8 units | no Study leader no Research assistant with Laborer |
| e. Study Leader | 3 units | 1 Research Staff 1 Laborer |
| f. Lab In-charge | 6 units | |

For full-time researchers, they should have at least 18 units of research load, divided as follows.

| | Units | | |
|--|--------------------------------------|--|---------------------------------------|
| Functions | Education Program Specialist 1 | Education Program Specialist 2 / Science Research Specialist 2 | Senior Science Research Specialist |
| RDE Programs/Project/ Study (without honorarium) | 9 | 12 | 15 |
| Unit Assignment/ Special Designation | 9 | 6 | 3 |

Honorarium/Stipend/Productivity Incentive for Locally Funded Project

- 1. A researcher or faculty shall only be entitled to an honorarium beyond his/her normal workload.
- 2. For university funded RDE projects, the monthly honorarium shall be as follows:

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 quarterly progress report (Appendix 22).
- 4. The last quarter of the honoraria or incentive for all internally and externally funded research can only be released upon submission of an accomplishment/terminal report (Appendix 23) and publishable article (Appendix 24, accepted and certified by the RPSO Director) in a refereed journal.
- 5. For externally funded RDE projects, the rate of the honorarium shall depend on the approved allocation of the funding institutions.

2.3.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 agencies funding institutions.

The USM Administration provides funds through direct allotment to the research unit, through the Research and Development Office (RDO) for college-based research, and through the Extension Services Office (ESO) for college-based extension. The RDE Directors manage the funds and determine the research prioritization based on the research agenda.

2.3.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.

2.4 Faculty and Researchers RDE Process

2.4.a Guidelines for RDE Proposal Processing

Proponents prepare proposals in accordance with the thrusts and agenda specified by the funding agency. The University Research, Development and Extension Committee (URDEC) facilitates the processing of research proposals for funding (see Figure 4).

The URDEC through the Office of the Vice President for Research, Development and Extension (OVPRDE) calls for submission of RDE proposals for internal funding during the first quarter of each year. The deadline for submission is 2nd week of May; evaluation is conducted in June-July and 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.

2.4.a.1 Submission of RDE Proposal for Internal Funding

- Faculty researchers submit one copy of the RDE capsule proposal (Appendix 17) to the College Research/Extension Coordinator while full-time researchers submit the proposals to the Head of the Research Unit.
- 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.
- The proponent obtains the endorsement from the College Dean and attaches the
 endorsement to the proposal. The proponent submits six copies to the RDO or ESO,
 and emails the softcopy to the RDO (<u>rdo@usm.edu.ph</u>) or ESO (<u>eso@usm.edu.ph</u>).
 The copies are distributed to the URDEC members for evaluation.
- The URDEC pre-evaluates and checks the duplication of the proposal. In case the proposal is rejected, RDO/ESO informs the proponent.
- For selected proposals, the RDO or ESO sends notification to the proponent to submit the detailed proposal (Appendix 18) and workplan (Appendix 19), and invites to present the proposal on the schedule set by the VPRDE.
- The proponent presents the proposal for evaluation to URDEC and technical experts.
- Proponent submits the revised proposal based on the comments of the panel of evaluators to RDO or ESO.

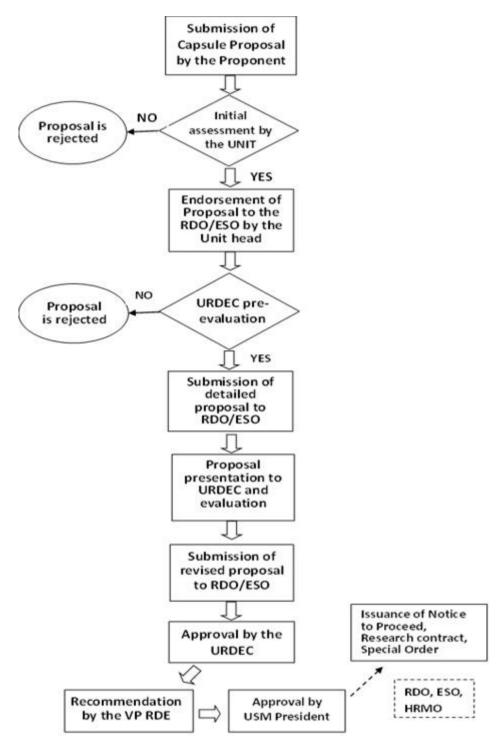


Figure 4. Flow of the RDE proposal processing for Internal funding

2.4.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.

2.4.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.
- The VPRDE 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.

2.4.a.4 Approval of Proposal

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

2.4.b RDE Project Implementation

2.4.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).

2.4.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 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.

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 Resource Management and Development Office (HRMDO).

2.5 Community Engagement and Outreach

The Extension Services Office (ESO) facilitates the transfer of applicable packages of technology and dissemination of useful information generated, developed, and adopted by the University with the end goal of enhancing the development and acceleration of growth in terms of per capita income and socio-economic well-being of the clientele, most especially, the less fortunate and underprivileged populace of the University's service areas. ESO make the technical assets, capabilities, and expertise of USM available to its service areas where these are needed, useful, and relevant through community engagements.

Community engagement is working with and through people affiliated by geographic location or interest groups that are having similar interest, practice, situation, or identity, based on mutual respect and commitment. It also involves collaborations with government and/or non-government agencies that are committed to provide resources as counterpart for bringing about change in knowledge, skills, behavior, and aspirations among the farmer-partners, industry-partners, etc. that will help improve their socio-economic well-being for sustainable development.

Funding for community engagement is proposal based thus faculty members are encouraged to submit need-based community engagement plans in the form of capsule/activity proposals for possible funding by the local, regional, national, and international funding agencies.

Partnerships with relevant government and non-government agencies are necessary component in the community engagement to sustain the gains of development in the conduct of extension activities.

The Community Engagement Project (CEP) is composed of several components in which each component has a series of activities to attain specific objectives. The scope of CEP is within the approved budget and defined time-period.

The CEP should be aligned with the University RDE Agenda and the *Unibersidad* and *Komunidad* "UniK" Extension Program of the ESO.

2.5.a Faculty involvement in community engagement and outreach activities

The CEPs can contribute directly and indirectly to both short- and long-term development in the service areas. CEPs activities can be undertaken by USM faculty and students, development workers/extensionists, visiting professors, and international students.

Private extension agencies can collaborate with any of the University Extension Units on a case-to-case basis, subject to the approval of the URDEC.

Faculty members planning to submit a CEP for funding either local or external must follow the RDE proposal processing procedure (Figure 4).

In community engagement, the faculty served as technical expert/adviser and facilitator. Activities to be conducted are in coordination with the partner agencies in accordance with the workplan.

Partners in the engagement are bound through a Memorandum of Understanding or Agreement. In this document, parties are committed to perform their respective duties and responsibilities to the best of their abilities to carry out the planned activities stipulated in the project proposal. Stipulated also in the MOU/MOA is the willingness of each partner to provide resources as counterpart in the implementation of the CEP.

During the course of project implementation, a quarterly monitoring and accomplishment (M&A) report and attachments shall be submitted to the ESO for evaluation in terms of effectiveness and efficiency. It shall be done by the Monitoring and Evaluation Team (MET) composed of the ESO Director, M&E Specialist, and an expert in the field who are designated by the USM President. The MET has given the capacity to recommend to the URDEC for the termination or continuation of the Project.

In summary, all faculty involved in community engagement shall:

- a. perform all activities in accordance with the approved proposal;
- b. secure research ethics clearance;
- c. document, evaluate, monitor and report all activities;
- d. subject the project to third party impact assessment; and
- e. disseminate extension outputs to stakeholders.

Part of the social responsibility of the University is the conduct of outreach activities through volunteerism. Volunteers render their services in the form of time, talents, and treasure without expectation of remuneration.

A College-based outreach program can be organized to address the immediate needs of the community. In community outreach, there are three key players: the facilitators, donors, and volunteers. The facilitators plan the activities, coordinate with the community and the donors, and organize volunteers. Donations can be in the form of cash or in-kind.

A letter of intent to conduct outreach activities will be addressed to the University President through the ESO for evaluation and recording purposes. Upon completion of the activity, an activity completion report together with the attendance sheet and other attachments shall be submitted to the ESO.

Outreach activities shall be reported either during Midyear or Year-end In-house Reviews.

2.5.b Student Community Engagement and Outreach

Community engagement for students in the University shall be integrated into the curriculum. Students can participate in community engagement activities as stipulated in the course syllabus. In this process students have the opportunity to engage with local communities and develop the knowledge, skills, and attitudes necessary for meaningful participation in sustainable development initiatives.

For both on-campus and off-campus community engagement activities, the faculty responsible for the course must submit a request letter to the Office of the Vice President for Academic Affairs. If approved, the necessary requirements must be completed. For community engagement, the evaluation shall be performed by the ESO Director, and the Director for Instruction. For community outreach, the evaluation of the requirements shall be performed by the Director of Student Affairs.

Coordination between the subject professor and the CEP leader will be done to plan and prepare for the activity. Activities like training facilitation, organizing, IEC development, validation, and distribution of IECs, collection of data, analysis of data, news feature article writing, and the like can be participated by the students during CEP implementation with the supervision of the subject professor and the CEP leader.

The ESO is also providing volunteer students (individual or group) the opportunity to render services to the USM Community and its service areas. An application form to render a 25-hour/semester volunteer service will be filled out by the student and can be obtained from the ESO. Interview will be conducted wherein their commitment to sharing their time, talents, and skills will be determined. Students will be trained to enhance their capacity to do volunteer work. The volunteers will be deployed to different CEPs/Offices or during a specific university activity where their talents and skills are needed. A tickler will be provided to them for monitoring of their accumulated number of hours rendered.

The campaign and recruitment of volunteers, interview, and training will be done every month of August and January, or in consonance with the opening of classes. This is to give them time to think and evaluate and fit their volunteer work with their class schedules. The Volunteer Coordinator will make arrangements with concerned CEPs/Offices/Activity In-charge regarding deployment and monitoring of the Volunteers. A certificate of completion will be awarded to each successful volunteer after the semester.

Those who have satisfied the 200-hour volunteer works and rendered a very satisfactory performance will be awarded an Excellent Volunteer Award in the form of a medal during University awards such as the Araw ng Parangal.

2.5.c Collaborations

Any government and private entities can collaborate with USM on RDE endeavors. A letter of intent of would-be partners could be sent to the Office of the President stating their needs and commitment on RDE matters including incidental expenses to be incurred during the conduct of activities. The partnership will be formally forged in the form of a memorandum of understanding/agreement to be approved by the Board of Regents.

2.5.d Training Development and Implementation

The University Extension Services Office provides training programs designed to give the trainees the knowledge, skills, and attitude to perform their job or duties to the best of their abilities. The training may take a couple of days or weeks, depending on the skills. Once there is an indication of certainty in offering a training course, the Training Management Group

(TMG) or training coordinator is created or appointed to implement and adequately manage the training course. By then, all training plans and activities should be finalized and formalized.

Figure 5 shows the training development and implementation flowchart.

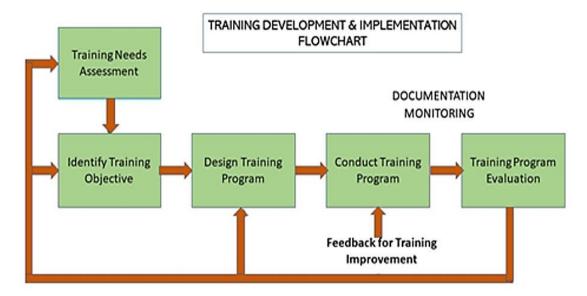


Figure 5. Training Development & Implementation Flowchart

Training Needs Assessment

A training program is organized with a particular purpose in mind. Two questions need to be answered: (1) who are to be trained (2) for what purpose are they to be trained? One must know who to be trained and why they need the training to have a basis for the formulation of specific training objectives, subject matter content, and training methods.

Identify Training Objectives

Training objectives must be explicitly stated. What is expected of the participant as a result of the training?

Consider what is to be taught with the intended behavioral outcome. Each training objective should describe a particular output to be attained. The more specific the statement of objectives, the greater the clarity of the statement of the intended behavioral outcome, and it can be evaluated.

Design Training Program

Determine what is to be taught. The bases for determining what is to be taught are the program or organizational needs and expressed needs of the trainees.

The final training design is essentially a teaching plan. A well-organized training design consists of the following:

- 1. Statement of the coverage of the subject matter to be taught
- 2. Objectives of the training activity
- 3. Teaching aids, equipment, and other tools
- 4. A brief explanation of how the trainee participates in the training activity
- 5. Identification of the people who are to be involved in the training

- 6. Methods of teaching
- 7. A list of learning activities that are to be assigned to the trainees
- 8. Provision for evaluation of the learner before, during, and after the training, and a follow-up after the trainee has been home for some time.

Conduct Training Program

The implementation of the training activities may be assigned to various working committees. A central contact person who provides leadership in coordinating the working committees should be assigned. In implementing the training program, one may see specific weaknesses or faults in the training plan. Such observations should be attended immediately, and alternative means of correcting them should be adopted. This is the flexibility that a written program provides.

Evaluation and Follow-up

Provisions should be made to evaluate the trainees during and after training. A benchmark evaluation may be administered at the start of the training to determine the level of knowledge, skills, or attitudes that they possess. The trainees' reactions to the training session or activities should be solicited. Encourage suggestions or comments from them and make revisions or adjustments, if necessary, in the training program.

Evaluate the training in terms of the specific objectives of the training. The trainees should know the result of the evaluation.

A program of following up with trainees in their work situations should be made to find out the applicability of what trainees had learned in their training to their jobs. Follow-up or postevaluation of the trainees will enable training program planners to obtain information on which to base decisions for improving future training programs.

Monitoring Training Programs

The office of the Director for Extension Services (ODES) is responsible for undertaking the monitoring function. The TMG or the Training Coordinator is responsible for providing the ODES with information regarding the Training course for which he/she is responsible. Different forms are provided by the ODES for such purposes.

3. RESEARCH ETHICS

3.1 Code of Ethics in Research

The Code applies to all areas and professions practiced at the University, and it encapsulates their respective rights and responsibilities. University research organizations and academic units provide more thorough and precise instructions on conducting responsible research, as well as develop and implement rules and guidelines to meet the various types of research practice and their complexities such policies and regulations must be in addition to the Code.

3.2 Guiding Principles

Research ethics' guiding principles are aligned with the underlying values of USM.

USM Core Values

Goodness -Research at the University spearheads need -based research outputs and contributes to the nation buildings and socio-cultural development

Responsiveness - Research organization facilitate transfer of technologies generated from research to the community for sustainable development

Excellence - The University endeavors to forefront innovation and contributes significantly to nation - building and socio -cultural development. To ensure excellence the University shall provide series of trainings, opportunities for development and resources for researchers.

Assertion of Right - To maintain the standard of research at the University, research organizations and researchers support and encourage its conduct while also sharing their knowledge and expertise with other researchers through mentoring.

Truth - The university's commitment to honesty and transparency underlies the way that study is carried out within. The University, its research organization, and its researchers help ensure that all of their acts and activities are free from deceit and fraud and foster trust and confidence.

3.3 Elements of Research Ethics

Excerpts from 2022 edition of the National Ethical Guidelines for Research

3.3.a Social Value

Social value refers to the contribution of the study to an existing social or health problem such that the results are expected to bring about a better understanding of related issues or contribute to the promotion of the well-being of individuals, their families, and communities.

3.3.b Informed Consent

An informed consent, to comply with these ethical guidelines, is a competent participant's decision to take part in research after receiving and understanding complete and relevant information about the study as well as their rights, without having been subjected to coercion, undue influence, inducement, or intimidation.

Obtaining informed consent is a process that begins when initial contact is made with a potential participant and continues throughout the study. By informing the potential participants of the purpose/s of the research project, repetition and explanation, answering their questions as they arise, ensuring that they understand each procedure, and obtaining agreement from them, researchers elicit their informed consent, and in doing so, manifest respect for their dignity and autonomy.

3.3.c Vulnerability of Participants

Vulnerable participants shall require special protection, as they have certain characteristics or are in special situations that tend to magnify their vulnerabilities or expose them to risks they may otherwise be unwilling to take. Vulnerable participants are those who are relatively or absolutely incapable of deciding for themselves whether or not to participate in a study for reasons such as physical and mental disabilities, poverty, asymmetric power relations, and marginalization, and who are at greater risk for some harms.

Vulnerable groups shall not be included in research unless such research is necessary to promote the welfare of the population represented and, cannot be performed on non-vulnerable persons or groups.

3.3.d Risks, Benefits and Safety

Research can only be justified if there is a reasonable likelihood that the participants or the population to which they belong stand to derive benefits from it.

Research shall be conducted only if there is an acceptable positive benefit-risk ratio and the participants who are going to be affected give their consent to assume research-related risks (e.g., adverse events, data sharing).

3.3.e Privacy and Confidentiality of Information

Researchers must respect participants' right to privacy. Unless required by law, the confidentiality of information shall always be observed. Records that link individuals to specific personal information shall not be released. This requirement shall be included in the informed consent form.

Researchers shall refrain from identifying individuals or groups when the release of information about them can expose them to possible harm or social stigma.

The researcher shall describe their data management and protection plan in the protocol, including the steps to be taken so that all who have access to the data and the identities of the respondents can safeguard privacy and confidentiality.

All photographs or images with human subjects, e.g., during research conduct, interviews, clinical trials, etc., their faces and any sensitive parts should be censored (painted over or pixelated) when reported or published in any form.

3.3.f Justice

In research involving human participants, the principle of justice refers primarily to the equitable distribution of both the burdens and the benefits of participation in research. It is unjust for one group in society to bear the costs of research while another group reaps its benefits. Research should not worsen existing health and social inequities.

3.3.g Transparency

Ethical research shall be characterized by transparency. All parties must be transparent about matters relating to their involvement and this includes any actual or potential conflict of interests. Transparency is not opposed to privacy. On the contrary, transparency – especially in research purposes, policies, procedures, governance, accountability, funding, oversight – is an element of ethical research that promotes confidence in the research enterprise, even when privacy and anonymity need to be preserved in matters of personal data. The need for transparency also entails disclosure of research results to research participants and other stakeholders.

Researchers must be transparent about aspects of a study that may have an impact on the rights, health, and safety of participants, or in respect to information that may have a bearing on the decision of participants to give or withhold their informed consent.

3.4 Adherence to the Applicable Provision of the Data Privacy Act of 2012

The determination of the appropriate level of security measures must consider the nature of the personal data to be protected, the risks represented by the processing, size of the organization and complexity of its operations, current data privacy best practices, and the cost of security implementation (See Section 20 of the Data Privacy Act of 2012).

The Institutional Data Privacy Officer shall provide the detailed policy/guidelines in how the protocol and conduct of research can comply with the Data Privacy Act.

3.5 Ethics in Publication

3.5.a Authorship credit and accountability

USM adopts the four criteria for authorship set by the International Committee of Medical Journal Editors (ICMJE) (https://tinyurl.com/2ek3rrte) to ensure that authors made substantive intellectual contributions to the paper and understand that they are accountable for what is published, as follows:

- 1. An author has substantial contributions to the conception or design of the study; or acquisition, analysis, or interpretation of data; AND
- 2. He/she participates in drafting the manuscript or reviewing it critically for important intellectual content; AND
- 3. He/she is involved in the final approval of the version of the manuscript to be published;
- 4. He/she agrees to be accountable for all aspects of the paper, ensuring that questions related to the accuracy or integrity of any part of the paper are appropriately conducted and resolved.
- **5.** Authors may use the CRediT (Contributor Roles Taxonomy) (https://www.elsevier.com/authors/policies-and-guidelines/credit-author-statement) to designate the accurate and detailed description of the contributions of each authors to the published work.

3.5.b Token authorship

USM discourages the practice of token or gift authorship. Token or gift authors are those listed as authors but did not make substantial contribution to the research and to the paper. All those who did not meet the criteria for authorship above should not be listed as authors.

3.5.c Ghost authorship

Ghost authors refer to those who made significant contributions to the research and to the manuscript but are not listed as authors. The term also applies to those who wrote the paper, usually for a fee, and are not actually part of the authorship. USM rules that all people who

qualify for authorship should be listed as authors. Furthermore, the University disallows its students, alumni, faculty members and research staff to let other people write their own research reports, theses and publications.

3.5.d Data fabrication and falsification

The University disallows intentional fabrication and falsification of research results. Data fabrication refers to the scenario where the researcher, instead of conducting the study, manipulates the data to create false results. On the other hand, data falsification occurs when the researcher conducts the experiment, but subsequently alters certain data points.

3.5.e Multiple submissions of paper for publication

All students, alumni, faculty members, and research staff of USM are prohibited to send substantially similar research papers to more than one academic journal simultaneously. This act is unethical and goes against the principles of responsible research and academic integrity.

3.5.f Use and re-use of research data for publication.

The use and re-use of research data for publication refers to the practice of utilizing data collected from previous studies or research projects in new publications. Researchers may seek to re-analyze the existing data to answer new research questions, validate previous findings, or combine it with their own data to achieve a broader scope of analysis. USM allows this if it is done with utmost integrity. Researchers should adhere to ethical guidelines and properly acknowledge the sources of the data. Failure to do so can lead to issues of plagiarism and academic misconduct.

3.5.g Publishing student thesis and other scholarly works

A student's thesis (or any portion thereof), special problem, special topic, term paper, laboratory result, and other scholarly works done, individually or in group, while earning a degree at USM is usually under the supervision of one or more supervisors or advisers. These works may be presented in fora and conferences and submitted as a manuscript to a journal or as a book or monograph to a publisher or in any form of scholarly publication provided that the submitting author(s) adheres to ethical contribution and authorship practices. The authors must include USM as one of their institutional affiliations during presentation or publication. Removal and non-inclusion of the names of student(s), supervisor(s), whose contributions to the work are substantial (as in 3.5.a), and USM in the presentation and publication are unethical and may be sanctioned according to applicable laws.

3.5.h Plagiarism

The University defines plagiarism as the act of stealing another person's research and data, whether intentionally or unintentionally, to utilize someone else's ideas, work, or opinions as their own, without acknowledgment. USM condemns plagiarism. As an initial detection of plagiarism, advisers of student theses and editors of USM-managed journals use Similarity Detection. A 20% or less similarity is acceptable for theses and USM-managed journals.

3.5.h.1 Forms of Plagiarism

Plagiarism occurs in many forms, such as:

- a. Verbatim plagiarism, or copying someone else's work, word for word. All direct quotes must be enclosed in quotation marks. The reference should also include the page number (or paragraph number for manuscripts with no pages) of the source.
- b. Cut-and-paste and patchwork plagiarism, or lifting portions of published material and combining them without proper citation.
- c. Synonym replacement, or copy-pasting a text while changing a few words, even if the reference is properly cited.
- d. Improper citations, or referencing work that either does not exist or has not been read. Cite only references that have been read. When information comes from a secondary source, this should be properly acknowledged.
- e. Self-plagiarism, or plagiarizing oneself

3.5.h.2 Avoiding Plagiarism

Merely acknowledging or citing a reference does not guarantee that one has not plagiarized. As stated by the University of Oxford website (https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism), "Avoiding plagiarism is not simply a matter of making sure your references are all correct, or changing enough words so the examiner will not notice your paraphrase; it is about deploying your academic skills to make your work as good as it can be" (par. 5).

Academic writing is not just about re-stating others' ideas, but it involves a writer's own understanding of prior knowledge (properly referenced) and expressed with the writer's interpretation. Some tips to avoid plagiarism are as follows.

- Refrain from reading one paragraph and writing right away. Instead, read several articles, make notes, scrutinize, and synthesize before writing. Think how all the articles you've read are similar, complementary, or inconsistent so that you can produce your own interpretation of prior knowledge.
- Do not cite a source you have not read. When you come across a writer who cited another author, then that text represents the writer's interpretation of the original author's words. Search for the original source and make your own interpretation.
- Remember that changing a few words in a text is NOT sufficient to avoid plagiarism.
 Instead, as suggested by the Massachusetts Institute of Technology (MIT) (https://integrity.mit.edu/handbook/academic-writing/avoiding-plagiarism-paraphrasing) you may vary a sentence more substantially by changing
 - o the structure of the sentence
 - the voice (from active to passive voice, or vice versa)
 - o clauses to phrases or vice versa
 - parts of speech

Some examples are provided below. These examples are guided by the MIT student guide indicated above.

Original Text

Higher education institutions (HEIs) are adopting experiential learning for its promise to mitigate the challenges of rapidly changing patterns of skills demanded in the labor market and rising youth unemployment. University student-centered outreach (SCO) programs, also known as outreach programs or student-farmer attachments, are a form of experiential learning implementation strategies.

Source: Ndaula, S. et al. (2022). Unravelling student gains in agricultural practical skills from experiential learning approach of the student-to-farmer university outreach in Northern Uganda. *Journal of Agricultural Research, Development, Extension and Technology*, 4(1), 46-61.

Plagiarized Text

According to Ndaula et al. (2022), tertiary institutions are adopting experiential learning because it can mitigate the challenges of rapidly changing skills demanded in the labor market. Thus, universities implement student-centered outreach (SCO) programs as a form of experiential learning implementation strategies.

This is plagiarized text because it is not sufficient to replace some words with synonyms.

Acceptable Paraphrase

Ndaula (2022) sees studentcentered outreach programs as opportunities for experiential learning. These allow students to develop skills required to adapt to the rapidly changing demands in the workforce.

The writer remained faithful to the original text without copying the way it was written. Words like "experiential learning" have specific meanings and we can use them without quotation. Words like "outreach" or "students" are general terms and may be retained.

Gastro-intestinal parasites affect livestock including buffaloes, and infection could result in significant losses to production. Anthelmintic treatment is one of the major strategies in the control of these parasites. However, over the years control has become increasingly difficult because of the development of resistance to anthelmintic drugs.

Source: Junatas, K. & Molina, E. (2021). Anthelmintic resistance of gastro-intestinal nematodes to albendazole, levamisole and ivermectin in Murrah buffaloes. *Journal of Agricultural Research, Development, Extension and Technology, 3*(1), 55-59.

According to Junatas and Molina (2021), parasites affect buffaloes, and infection may result in major losses to production. Anthelmintic treatment is one of the effective strategies to control these parasites. However, control is becoming difficult because buffaloes develop resistance to anthelmintic drugs.

[change sentence structure]

One of the major problems in raising buffalo herds is infection from gastro-intestinal parasites, particularly because buffaloes have been observed to develop resistance to anthelmintic treatment (Junatas & Molina, 2021).

OR

[change sentence structure and change active to passive voice]

Buffaloes commonly experience infections from gastro-intestinal parasites that resist anthelmintic treatment, [change clause to phrase/change parts of speech] leading to decreased production (Junatas & Molina, 2021).

3.5.i The Use of AI in Writing and Publishing

- 1. Responsible use: The utilization of AI tools is permissible solely for the enhancement and organization of language and grammar.
- 2. Integrity and Originality: AI-generated content should ensure that it contributes to the originality and integrity of the research. AI shall be used as a supportive tool to express ideas and research, rather than to generate content.
- Verification and Validation: AI-generated content shall be thoroughly reviewed and validated for accuracy, coherence, and relevance to ensure that it does not inadvertently copy or reproduce existing copyrighted material without proper attribution. AI-generated information shall be cross-checked with reliable sources and academic literature to ensure credibility.
- 4. Supervision and Guidance: AI tools shall be used with the guidance and supervision of an academic advisor or supervisor. AI should be seen as a complementary tool, and its use should align with academic guidelines and ethical standards of the University.
- 5. Academic Integrity: The principles of academic integrity shall be adhered to throughout the writing process. Any form of academic misconduct, including the misuse of AI technology, shall be prohibited.

3.5.j 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.

- 1. 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 20%;
 - b. the AI detection tool does not exceed 20%;
 - c. there are no full sentences or paragraphs are completely lifted from other sources;
 - d. 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);

- e. the paragraphs are written in a clear and cohesive manner, with appropriate references to the scholarly literature.
- 3. If any of parts 2a through 23 is not satisfied, then the adviser returns the manuscript to the student and provides additional guidance as needed.
- 4. The adviser is responsible for checking that students submit original work. Even a quick scan, together with plagiarism or AI detection software, is sufficient to detect potential plagiarism or irresponsible use of AI tools. Some indicators include:
 - a. incoherent paragraphs; and
 - b. very general phrasings that do not indicate knowledge of the context of the study
- 5. The major adviser shall sign the manuscript after verifying that parts 2a through 2e are all satisfied, and that the content passes the standards of an undergraduate thesis, .
- 6. The student certifies that their paper is original (Appendix 1) and submits this form to the college research coordinator (CRC).
- 7. The CRC shall sign the thesis outline/manuscript after confirming that parts 2a through 23 are satisfied. If not, the CRC shall return the outline/manuscript to the thesis adviser for further revisions.
- 8. For the thesis manuscript, after it has been approved by the CRC, 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.

3.6 Research Ethics Committee (REC)

3.6.a Rationale of the REC

The USM REC established a set of guiding principles, such as minimizing the chance of harm, obtaining informed consent, safeguarding anonymity and confidentiality, avoiding deceptive activities, and providing the right to withdraw, and to support researchers in establishing goals and reconciling competing values that are significant to researchers.

3.6.b Types of Review of the REC

Full review - More than minimal risk and belong to the vulnerable population

Expedited review - Not more than minimal risk, Surveys not involving delicate questions, Use of stored specimens (e.g., biopsy specimens)

Exempt from review - No direct human participation nor use of identifiable human tissue, biological samples and data. Not more than minimal risk or harms:

3.6.c Research Ethics Review Process

- 1. The University Ethics Review process is informed by the National Ethical Guidelines for Research Involving Human Participants by the Philippine Council for Health Research and Development, 2022.
- 2. USM Research Ethics Committee Office (RECO) conducts the ethical review of research and extension proposals involving human participants and other relevant studies in the University based on an assessment of the research activities outlined in the protocol and protocol-related documents.
- 3. USM faculty, staff, and student researchers are required to secure ethical approval for any research involving human participants. All research ethics forms are available un the USM RDE page (https://www.usm.edu.ph/rde/).
- 4. Submissions to the RECO shall be from the 1st to 20th of the month, for inclusion in the RECO monthly review. Submissions received by the RECO from the 21st to the end of the month shall be considered in the subsequent month's review.
- 5. Students with approved thesis outlines whose research involves human participants shall be required to print one set of application forms and attachments, to be submitted to their CRC. The CRC shall check if the forms are completely filled out and if all attachments are in order.
- 6. The CRCs will prepare a list of all ethics applications within their college and submit all printed applications and attachments to the RECO.
- 7. Faculty and staff researchers may submit their printed applications directly to the RECO.
- 8. The RECO shall record all ethics applications in the logbook. Further, they shall ensure that all applications are properly archived in a safe and secure place that can only be accessed by authorized personnel of the RECO. The RECO shall store all printed copies for two years from the date of application.
- Researchers whose applications can be processed via expedited review as determined by the RECO shall receive feedback through email within 14 working days. Researchers whose applications would require Full Board review shall receive feedback through email within 30 working days.
- 10. Researchers whose application requires re-submissions shall be given 10 days to comply with the requirements set forth by the Committee. If the researcher fails to comply within 10 days, any subsequent application shall be treated as a new submission.
- 11. Student researchers whose ethics applications are approved shall receive a printed certificate to conduct from the RECO. They shall sign in the logbook once they receive their printed certificate. After their study, students shall upload the final copy of their thesis in RDEIS. They can now proceed to the RECO to receive their Ethical Clearance.
- 12. Faculty and staff whose ethics applications are approved shall receive Ethical Clearance. They are also expected to submit quarterly progress reports of their progress to the RECO. The reports should describe compliance to the approved protocol as well as any problems encountered.
- 13. In case of any changes in the methodology, researchers shall inform RECO in writing regarding their new protocol and any changes in their methodology. They shall receive a decision letter from the RECO.

- 14. In case of adverse/negative events that happened during conduct of the study (for researchers and participants), the researchers must submit a report to the RECO. The RECO will conduct on-site visit to assess the risk and give recommendations (to proceed/terminate).
- 15. The researcher shall obtain the voluntary informed consent of the prospective research participant/respondent. In the case of an individual who is incapable of giving or who has diminished capacity to give informed consent, the researcher must obtain their assent together with the consent of a legally authorized representative, according to applicable laws. Hence, the informed consent shall consider essential information for participants, documentation of consent, waiver of informed consent and renewing consent.
- 16. Ethical clearance is usually for a period of one year, which may be renewed if an application for continuing review is submitted before the expiration of the earlier ethics clearance. Renewal applications must be received by the USM REC no earlier than 30 days before the expiry of the current approval.

3.7. IACUC Protocol Review Workflow

Pursuant to Republic Act 8285, otherwise known as the Animal Welfare Act of 1998, all studies involving live vertebrate animals are subject to the review of the Institutional Animal Care and Use Committee (IACUC).

Before a scientific procedure can be carried out on animals, the procedure must first be approved through the USM-IACUC's protocol review process.

- 1. For registration and documentation, the researcher shall first register online through this link: https://bit.ly/3Q58ofe
- 2. The link can be accessed through the official facebook page of USM IACUC.
- 3. The researcher shall submit two (2) hard copies (Letter size bond paper) of the accomplished USM IACUC Form 1 (Appendix 20) together with a copy of the certificate of registration enclosed in long brown envelope to the IACUC Office at least 3 months before the commencement date of the study/procedures. Form 1 accessible through the USM FB page and the USM RDE website.
- 4. The Chairperson of the IACUC shall assign the study/procedure under one of the following categories (refer to DA AO 40, s.1999 for the description of the categories):
 - Category 1: Procedures of Low or Mild Severity
 - Category 2: Procedures of Medium or Moderate Severity
 - Category 3: Procedures of High or Substantial Severity

*Category 2 procedures are for expedited review by the IACUC chairperson, and 1 or 2 other members of the committee assigned by the chairperson

*Category 3 procedures are for full review by a quorum of the IACUC, but not by less than 3 members.

5. The IACUC Chair assigns the reviewer of the protocol. The IACUC shall notify the researcher the result of the evaluation, including summarized comments and

^{*}Category 1 procedures are for expedited review by the IACUC chairperson.

- recommendations. In case of revisions, the researcher shall submit one (1) hard copy of the revised document to the IACUC Office. No study/procedure can be conducted without prior approval.
- 6. Note that for Category 3 procedures, approval means approval of most of the quorum present. No member may participate in the review or approval of a procedure in which the member has a conflicting interest (e.g., direct involvement in the project) except to provide information requested by the IACUC.
- 7. The proponent shall submit the final copy of the IACUC Form 1 signed by the adviser, for the approval by the IACUC committee.

4. RDE MONITORING AND EVALUATION PROCESS

4.1 Project Monitoring

The RDE Directs 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 19), narrative report (Appendix 21), and quarterly report (Appendix 22) 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 21), and quarterly report (Appendix 22). 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 projects are under the USMARD Center or PICRI, the documents are first recorded and prechecked by RDO then forwarded to the respective Directors for evaluation.
- The VPRDE further reviews the document and signs the complete quarterly monitoring report (Appendix 21 and 22).
- The validation of the progress of the research 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.

4.2 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 23) and publishable output (Appendix 24) or IP applications after the completion of the program/project.

5. INTELLECTUAL PROPERTY

5.1 Intellectual Property/ Intellectual Property Rights/ Ownership

5.1.1 Copyright

- 1. Copyright of all works (as defined by Article IV- Section 32) shall be owned by the University unless under the following circumstances:
 - a. If the work is a product between the University and an external party, copyright ownership is subject to the terms provided in the agreement of both parties;
 - b. If the author is not a student, employee, faculty, staff or part of USM community; or
 - c. If the work is not funded or commissioned by the University or by third party involving the University.
- 2. All published works owned by the University shall bear a copyright notice composed and affixed in accordance with Philippine Copyright law. University-owned materials shall bear the notice:
- © (Year of publication) University of Southern Mindanao

No other annotation, regarding a division, research center or other University unit may be used in the copyright notice.

5.1.2 Patentable Technologies

- 1. All IP's, including new plant varieties referred to in this policy made or created by the University personnel or students shall be owned by the University when either of the following applies:
 - a. The invention developed in pursuant to the University Research operations.
 - b. The invention was developed through research and development funded by any government funding agency, government assisted funds, or allocation of the University funds.
 - c. The invention developed by University faculty, researcher, student or staff with substantial use of the University resources as stipulated in Article 4- Section 31 of this IP Policy
- 2. Subject to the provisions of the Technology Transfer Act of 2009, if the invention is the result of collaborative efforts of the university and external party, the patent over said invention shall belong in joint ownership among the university, the inventor/s of the external party.

3. Conflicts pertaining to IP rights shall be resolved through mediation and arbitration to be facilitated by the Office of the Vice President for Research, Development and Extension. Only in the event of failure of any of such modes may such conflict be the subject of court action.

5.1.3 Trade and Service Marks

The university shall own trade or service marks relating to goods or services distributed by the university. These include names and symbols used by the university in conjunction with its computer programs or university activities and events.

5.1.4 Protection of Undisclosed Information/ Trade secrets

Upon the determination of the President, circumstances are such that well-defined interests of the general public will better be protected by claiming legal protection of information or technology as "trade secrets".

5.1.5 Tangible Research Property (TRP)

Research results which are in a tangible form (i.e. integrated circuit chips, computer software, biological organisms, engineering prototypes, laboratory notebooks or logbooks) which cannot be the subject of any other kind of intellectual property protection are presumptively owned by the university.

5.1.6 Theses and Dissertations

- 1. A student shall own the copyright of his/her thesis/dissertation and associated data subject to provisions of applicable laws, the provisions of this policy as well as any agreement(s) with the university and/or external parties. However, if the research receives financial support from grants, salaries, stipends from funds administered by USM or utilizes university's facilities and equipment, the university shall retain a degree of copyright ownership over the thesis/dissertation.
- 2. As a condition of awarding a degree, the student shall grant the university a non-exclusive worldwide, royalty free license to reproduce, publish and responsibly distribute copies of said thesis/dissertation in any form, and also entails placing a declaration on thesis use and publication on the page immediately following the title page.
- 3. In the event a thesis/dissertation contains information on an invention that may be patentable or registrable, if the same contains confidential information, and has been subjected to confidentiality agreement, the department, institute or college may withhold public access to said thesis/dissertation and the defense proceedings and may take such other reasonable steps to protect the author, the university and/or third party's IP rights. Thus, a confidentiality statement shall also be declared, and the use, reproduction and publication of the thesis/dissertation shall be applicable when disclosure has been executed and/or after the expiration of the confidentiality agreement.
- 4. The "Declaration on Thesis Use and Publication" will be stated as follows:

"I hereby acknowledge and comply with the regulations set forth by the University of Southern Mindanao concerning the preservation and utilization of this thesis. I understand that University of Southern Mindanao possesses the right to retain copies of the thesis/dissertation, permit its consultation, and publish all or parts of it in accordance with the principles of academic openness and intellectual property protection. Additionally, University of Southern Mindanao is authorized to preserve and compile the thesis/dissertation through photocopying, reprinting in a reduced format, or employing other reproduction methods."

I am fully aware that should my thesis/dissertation be subject to any confidentiality agreement, this authorization statement shall only be applicable after the expiration of the confidentiality period.

I am fully aware that I should carry and include the University of Southern Mindanao, the College and the Department, and all individuals who contributed substantially to this thesis/dissertation, in any publication related to it."

5.2 Incentives on IP Assets

The university shall assign to the author(s), inventor(s) incentives for IP generated subject to availability of funds, provided that the requirements for incentives, based on the Implementing Rules for the USM Revised Intellectual Property Policy of 2019 (BOR Resolution No. 37 Series of 2020), are submitted. These are:

- Rule 7. General Rule for Ownership Any technology that is a result or the product of the four mandated functions of the University mainly instruction, research, extension and research generation shall be owned by the University unless mentioned under circumstances listed in Article 5 of the IP Policy Section 101.
- 7.1 Ownership shall belong to the employee, if the incentive activity is not a part of his regular duties even if employee uses the time, facilities and materials of the employer.
- 7.2. Ownership shall belong to the employer, if the invention is the result of the performance of his regularly-assigned duties, unless there is an agreement, express or implied, to the contrary.
- Rule 8. Who may be named as applicant in the application. The "University of Southern Mindanao" shall be assigned as the sole "Applicant" in the IPOPHL application form which places the University as the owner of the IP. This rule shall not apply only if conditions of Rule 7.1-7.2 are exemplified.
- Rule 24.1. For Patent, Utility Model, Industrial Design and Plant registry, incentive for filing shall only apply
- (1) If the technology has been subject for technology pitching, before the grant of registration number provided the IP was filed. Certificate as presenter shall be attached together with the IP application number;

- (2) If the technology has been featured in science and technology symposiums, conference, expo or exhibit, before the grant of registration number provided the IP was filed. Certificate for poster or oral presentation entry shall be attached together with the IP application number;
- (3) If the technology has been part of the branding or any form of derivation for the realization of trademark application before the grant of registration number provided the IP was filed. IP application number for Trademark shall be attached;
- (4) If the technology has identified the adapter before the grant of registration of number provided the IP was filed. Signed Memorandum of Agreement signed by the University and adapter shall be attached together with the IP application number;
- (5) The technology has been applied for commercialization before the grant of registration number provided the IP was filed. Signed memorandum of agreement between the funding agency and the University shall be attached together with the IP application number.
- Rule 24.2. For copyrighted works, incentive for filing shall only apply if the following supporting documents are fulfilled for each case described:
- (1) If the copyrighted work refers to a book which has contributed to the scientific body of knowledge and used as textbook or reference for teaching Course syllabi relating to the copyrighted works, or Certificate from school library stating the copyrighted work has been indexed shall be attached together with the ISBN number.
- (2) If the copyrighted work of any form which has commercial value and contributed income generating funds to the University. Receipt of purchase of sold copies by institution or business establishments (i.e., bookstores, school libraries) shall be attached together with the ISBN number.
- (3) If copyright work in the form of literary work, dramatization, musical composition and audio-visual works has been adopted for filmmaking or multi-media production. Certificate from the production companies stating the copyrighted work has been used in any form of its operation shall be attached together with the ISBN number.
- (4) If the copyrighted work in the form of computer program has been adopted for operations and system in the University or other institution. Certificate from the office or institution that the copyrighted work has been used shall be attached together with the ISBN number.

If the conditions above are satisfied, an incentive of Php 5,000.00 shall be given to researcher/s after filing of Patent/Utility Model/Industrial Design/Trademark/Copyright/Plant Registry upon receipt of application form with assigned application number from IPOPHL. An additional incentive of Php 20,000.00 for every granted Utility Model; and Php 50,000.00 for every granted invention shall be given respectively, provided that the registered IP asset has documented evidence of utilization or commercialization.

Shares in royalty and other revenues shall be payable to the creator(s)/inventor(s) of the IP even after retirement, termination of their employment, contract of service, or in the case of

students after their graduation; provided further, that said creator(s)/inventor(s) have not been dismissed from the university because of violation of provisions of this policy (e.g., selling or compromising university trade secrets).

5.3 Disclosure and Protection of Intellectual Property

5.3.1 IP Disclosure and Application Process

- 1. Before the execution of the Research Agreement, the researcher(s) shall comply for technology assessment report forms (USM IPTTBDO TA-1 and 2).
- 2. The researcher(s) shall promptly identify and disclose the intended IP to USM TTO by submitting the following requirements:
- a. IP Disclosure Form (to be secured from the USM IPTTBDO)
- b. Waiver forms (to be secured from the USM IPTTBDO)
- c. If technology derived from student's thesis/ dissertations- final indexed manuscripts
- d. If technology based on University funded research- signed terminal report
- e. In case of personal funded research- report of the study and Waiver Form D

USM IPTTBDO or IP unit shall determine and recommend the technology for IP protection through the URDEC. IP derived from externally funded research shall be filed without prior recommendation from URDEC by virtue of signed MOA of the respective project.

The URDEC shall check for legitimacy and review proposed technology for IP filing application.

In case of external party involved such as in research grants with respect to the IP, the TTO or IP Unit shall notify the external party and proceed with the terms of the agreement with such party.

No public disclosure about the IP shall be made which include the disclosure of confidential information and will constitute prejudice of its full protection. If public disclosure is made, an IP application shall be filed within three (3) months from the date of such public disclosure.

Concerning biodiversity, genetic resources or materials associated with traditional knowledge, and indigenous knowledge, systems and practices, the rules on disclosure for the protection of their IPs, as stated in Section 3, Rule 12 of R. A. No. 10055, shall govern.

5.4 Technology Transfer

In pursuant to Article IX of R. A. No. 10055 and Rule 24, Chapter IX of the IRR or Joint DOST-IPO Administrative Order No. 02-2010 dated 18 August 2010, the University of Southern Mindanao IPTTBDO particularly its Technology Transfer Office is hereby created which shall carry out the following functions:

- 1. Manage the University Portfolio which includes providing assistance in IP drafting disclosures for IP Filing and prosecution with IPOPHL and maintenance of registered IP's;
- 2. Evaluate potential of IP's for deployment, extension, and commercialization which includes preparing technology assessment report, business/ marketing plans, and IP valuation reports;

- 3. Assist university researchers and business/other organizations seeking technology adopters;
- 4. Assist in preparing legal documents pertaining to IP and commercialization;
- 5. Negotiate between technology adopter and the author/inventor of technology for purposes of registration, licensing, joint venture or other technology transfer arrangements;
- 6. Review and recommend, upon consultation with the appropriate units of the constituent universities, appropriate intellectual property policies for the university;
- 7. Promote a culture of innovation and entrepreneurship in all USM campuses through provision of training courses and seminars on intellectual property and technology commercialization;
- 8. Administer and monitor implementation of the IP Policy.

The President may authorize the Vice-President for Research, Development and Extension (VPRDE), or other Designee, the authority to negotiate and execute, on behalf of the University, legal documents relating to the University's IP and the formation and operation of companies for the commercialization of University technologies.

The URDEC shall function as a review committee that will oversee the management of USM Tech Transfer Office.

5.5 Commercialization

5.5.a Intellectual Property Commercialization

USM has the first right to commercialize any IP generated in the University. In cases where the University failed to commercialize an IP one year after it was granted, the inventor/s shall be allowed to commercialize or participate in a spin-off company subject to the provision of RA 10055 Chapter VI.

5.5.b Identification of IP's for Commercialization

- 1. The requirements for IP to be considered eligible for transfer or commercialization are as follows:
 - a. Technology Assessment Report forms (USM TTO TA- 3, and 4);
 - b. Cost and revenue analysis report, stating total R&D cost particularly to production of technology;
 - c. Acceptance of the technology/IP application or the grant of the patent and/or other IP.
- 2. USM- TTO shall determine and recommend to the University the technology for commercialization with approval from URDEC.
- 3. The URDEC shall check for legitimacy and review identified technology for commercialization.

To facilitate promotion, dissemination or commercialization of technologies generated, the researcher(s) shall provide the USM-TTO with relevant information/documents to prepare

various marketing or promotional tools or kits, where applicable, without compromising the full protection of the IPs, such as:

- a. Technical or terminal reports, consisting of manufacturing process or operations, materials and equipment requirements or specifications, quality control parameters, utilities or power requirements, product quality specifications and test procedures, and others;
- b. Invention disclosure documents;
- c. Design and/or diagrams or blueprints of equipment; and,
- d. Plant design or layout.

In case of an external party involved such as in research grants with respect to the commercialization of the IP, the TTO or IP Unit shall notify the external party and proceed with the terms of the agreement with such party.

Secondment shall be allowed and shall be in accordance with exiting University and provisions in RA 10055. In the case where the University researcher would be employed by an existing company, which will pursue the commercialization of the technology/IP, the applicable provisions of R. A. No. 8439 shall prevail.

5.3.c Technology Commercialization Modes and Principles

The Guiding Principles on Intellectual Property Commercialization stated in Chapter II of the Joint DOST-DTI-IPOPHL Administrative Order No. 001 must be observed in the transfer or commercialization of IPs through various modes.

Modes of Commercialization

- 1. Licensing/Other Agreement The University, through the TTO, shall prepare a Licensing Agreement or other appropriate agreement by the following process:
 - a. The University, through consultative meetings/ negotiations by the TTO and the researcher(s), shall closely coordinate with prospective Technology Adopter to discuss or negotiate on the terms of the technology transfer or commercialization and compliance therewith.
 - b. The University, through the TTO, shall prepare a draft of the licensing agreement, or a Technical Service Contract, or any other agreement, signed by both University and prospective Technology Adaptor.
 - c. In case of direct negotiation for the technology commercialization agreement, the university shall submit a written request to the Secretary of DOST to obtain a written recommendation from the DOST Secretary on the agreement and to secure a Fairness Opinion Report (FOR) from an independent third-party body, submitting relevant documents, such as:
 - i. Proposed transaction;
 - ii. Valuation Report;
 - iii. Due Diligence Report on the parties to the transaction, and
 - iv. List of potential recommendees for membership in the Fairness Opinion Board (FOB)

- v. Signing or Execution of the Agreement upon obtaining the written recommendation from the Secretary of the DOST and/or favorable FOR on the transaction, the agreement may be signed or executed by the parties.
- 2. Spin-off The University's researcher-employee may establish or participate in a spin-off firm to commercialize or pursue commercialization of the IP's generated from the R&D funded by the government by complying to the provisions of the IRR of the RA 10055 Chapter VI and Chapter VII rule 16. The spin-off firm may apply for a Technology Business Incubator (TBI) arrangement based on existing TBI policies of the University.
- 3. Direct Sale The University, through the TTO, shall have a Technical Service Contract, or any other agreement, and present the agreement to the prospective Technology Adaptor for review before finalization, signed by both parties to facilitate technology transfer.

5.3.d Revenue Sharing Between RDI And Researcher(s)

Under the rights of the researchers granted under R. A. No. 8439 or the "Magna Carta for Scientists, Engineers, Researchers, and other S&T Personnel in Government", the University and the researcher(s) shall have sixty percent (60%), and forty percent (40%) share, respectively, in the revenues derived from R&D projects.

Net profit shall mean gross sale minus royalty, production cost and other expenses.

- a. When the University undertakes the commercialization/distribution of the technology and IP's, royalty share shall be 15% of the gross sale. Further, the researcher/s or author/s shall also have 20% share in the net profit.
- b. When the University undertakes commercialization/ distribution of the technology and IP's involving external party (research grants/ collaborators/ etc.) royalty sharing shall depend on the terms of agreement with the involved party.

The researcher may claim payment for the share upon submission of the following documentary requirements:

- a. Copies of applicable agreement, and report on the technology transfer agreement stating the names and share distribution of all entitled University personnel;
- b. Copy of IP protection filing or Certification or Registration of the relevant technologies/IPs/IPRs, if applicable;
- c. Copy of technical report in published form or project technical report, both with International Standard Book Number (ISBN) of the University's technologies without IP Protection; and
- d. Copy of Official Receipt of payment for royalty made by the Technology Adopter to the University.

The apportionment/distribution of the share among the researchers shall be stipulated in the MOA/Special Order/Research Agreement. In the absence of a written agreement among the researchers, the share shall be distributed among involved researchers as follows:

- a. For technologies/IPs with only one researcher, one hundred percent (100%) shall be vested on the sole researcher;
- b. For technologies/IPs/IPRs with two researchers, sixty percent (60%) shall be given to the principal author/researcher and forty percent (40%) to the co-researcher; and
- c. For technologies with three or more researchers, forty percent (40%) shall go to the principal author/researcher and sixty percent (60%) shall be distributed among the other researchers.

Duration of Payment. The researchers shall continue to receive their share under the following conditions:

- a. Researchers who have retired or have severed their employment ties with University shall continue to receive their share within their lifetime for as long as there are royalties and revenues derived from the commercialization of the technology/IP/IPR;
- b. In no case shall the researcher assign, convey, or transfer his/her right, title, or interest in and to the share in royalties.

The University's share of the Net Revenue shall be distributed as follows:

a. College/Unit (of where the author of IP is assigned, c/0 College Dean) 25%

b. Tech Transfer Office (c/o IPTTBDO) 50%

c. Innovation Fund (c/o R&D Director) 25%

5.3.e General Provisions

Basic Provision - Any issues on the IPs/IPRs generated out of Government funded R&D shall not impede the expedient transfer, roll-out or commercialization of the needed technology, as may be determined mainly by the DOST Secretary in case of national emergencies or the need to advance national and local interests.

Dispute Resolution - Any dispute relating to any provision in this Protocol or arising between the University and the researchers about any of the provisions in the Research Agreement shall be resolved amicably through the alternative dispute resolution process of the University.

Separability Clause - If any provision of the Protocol is declared unconstitutional, the same shall not affect the validity and effectivity of the other provisions.

Amendments - The IPTTBD office upon recommendation to, and approval of the University President, may as it is necessary, amend, revise, and/or add to these implementing rules and regulations in order fully implement the intent of the intellectual property rights.

Effectivity - The University administration shall endeavor to make this protocol effective upon the approval of the USM Board of Regents and 30 days after its publication in the University website.

6. PUBLICATION

6.1 University Research Journals

The RDE envisions that USM will manage and publish journals that are included in international indexes such as Web of Science and Scopus. Any research institute including academic units may opt to publish its own refereed journal. These journals should be listed in the Open Journal System and listed in the USM RD&E webpage (https://journals.usm.ph/) for improved web visibility. For an article to be published in the OJS, the publisher shall show proofs of review by at least two external referees for each article published in the journal. An external referee shall be those considered expert in the field under consideration, with publications verified through Google Scholar and other indexing entities. The Research Publication Services Office and the University Information and Communication Technology Office shall assist the editorial board of each journal in the online publication of its articles.

As of 2023, USM has four peer-reviewed journals: the Journal of Agricultural Research, Development, Extension, and Technology (JARDET), Studies in Natural and Applied Sciences (SNAPS), Journal of Business, Economics and Governance Studies (JBEGS), and the Journal of Education and Community Development (JECD). JARDET is handled by the Research Publication Services Office (RPSO) under the supervision of the Director for Publication Services, under the Vice President for Research, Development and Extension (VPRDE). SNAPS, JBEGGS, and JECD are handled by the College of Science and Mathematics (CSM), College of Business, Development Economics and Management (CBDEM), and the Graduate School (GS).

6.1.a Aims and Scope of University Research Journals

JARDET, formerly the USM R&D Journal, is a peer-reviewed and multidisciplinary journal in English that publishes reports of original research in agriculture and its allied fields including but not limited to animal science and aquaculture, agriculture-related social research, business, economics and management, education, engineering and computing, human ecology, food sciences, and veterinary and health sciences.

SNAPS is an open-access scientific journal encompassing a wide suite of areas in the natural and physical sciences, mathematics and engineering, and sustainability science. SNAPS considers full articles, rapid communications, notes, reviews, and discussion papers. To reduce carbon footprint emission, all issues of SNAPS will be published and archived electronically online.

USM journals accept original research papers and reviews. They welcome submission from all sectors: authors, scientists, researchers, faculty from various institutions and agencies. One to two issues constitute a volume annually.

6.1.b Journal Open Access Policy

JARDET and SNAPS are open access journals - all articles are published open access and as such do not have any subscribers' fee and its contents are free online.

6.1.c Submission Preparation Checklist

As part of the submission process, authors are required to check off their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines.

- a) The submission has not been previously published, nor is it before another journal for consideration (or an explanation has been provided in Comments to the Editor).
- b) Disclosure of the conflict of interest.
- c) The submission file is in Microsoft Word document file format.
- d) Where available, URLs or DOI for the references have been provided.
- e) The text is double spaced; uses a 12 point Arial font; employs italics, rather than underlining (except with URL addresses); and all illustrations, tables, and figures are placed at the end.
- f) The text adheres to the stylistic and bibliographic requirements.

6.1.d Preparation of Manuscript

To ensure rapid and accurate publication, it is essential that manuscripts conform to the instructions below. Manuscripts which are not in accordance with the specifications and needs extensive editing will be returned to the authors.

A typical paper is composed of the following: a title page, abstract and keywords page, an introduction, materials and methods, results, discussion, references, and supporting tables and figures. Reviews, short communications, and theoretical papers may have a different outline, but must still conform to accepted scientific conventions.

Each article, including tables, figures and other appendices should not be more than 30 pages on A4 paper (210mm x 297mm or $8.27" \times 11.69"$). Specifications for the presentation of the manuscripts are:

Spacing, Font Size and Margins. Type the manuscript in Microsoft Word Document (2000 or 2007 Version), in double space, and with 12-point Arial font. Margins should be 2.54 cm (1") on the top, bottom, and left-- and- right--hand sides of each page.

Arrange contents of the manuscript for an original research article in the following order:

Title Page

The title of the article should be typed in sentence case letters, left aligned, and should not be more than 15 words.

The next line lists the authors, left aligned. Authors' name should be complete. Omit institutional and social designations.

The next line lists the authors' institutional affiliations(s) and address. Author affiliations are indicated by numbered superscripts and should be numbered in order of appearance in the list of authors.

The next line, lists the email address of the corresponding author, after the words Corresponding author email address, followed by a colon.

The next line, contains a condensed running head. After the words Running Head, followed by a colon, provide a condensed title, limited to no more than 60 characters.

Abstract Page and Key Words

The abstract serves as the summary, written in past tense, one paragraph of no more than 250 words, and must be on a separate page, along with the key words. It should include the rationale for the study, objectives and topics covered, a brief description of methods, results, and conclusions.

List about six keywords in alphabetical order. List single word, compounds or phrases that represent the content of your manuscript.

Introduction

This section should contain the rationale, brief literature review, hypothesis, and objective(s) of the paper.

Materials and Methods

This should include details of the methodology for replicability, adoption or adaptation of the procedures for future studies. You should use subheadings to separate different methodologies. Describe established methods, and cite a reference where readers can find more detail. Standard techniques can simply be cited, even if small modifications have been made.

Results and Discussion

Results presented should be consistent with the objectives of the study. Use subheadings to separate the results of the different experiments. The combination of Results and Discussion is permitted.

The conclusion part should include the implications of major findings of the study. Recommendations can be included.

Acknowledgement

This section should indicate the source(s) of funds and institutions or individuals who helped in the study.

Tables

Tables must be numbered consecutively in Arabic numerals according to sequence mentioned in the manuscript. Acronyms or abbreviations should be spelled-out or defined in a footnote. Appropriate quantities and units in SI (Systeme International), and other qualifications should be indicated within the table or footnote to make the table a "stand alone" source of information. Do not incorporate tables in the text as this will be done by the Journal staff at the later stages of processing.

Figures

Figures must be numbered consecutively in Arabic numerals according to the sequence mentioned in the manuscript. Figure with captions should be placed in separate pages. Acronyms or abbreviations should be spelled out or defined in a figure caption. Submit graphs in Microsoft Excel files to facilitate formatting by the Journal staff at the later stages of processing. Submit images in separate files in jpeg or tiff with resolutions not less than 300 dpi.

Pagination and line numbers

Number all pages of the manuscript consecutively at the right hand bottom corner of each page. In addition, provide continuous line numbers at the left side of the manuscript.

Numbers

Avoid starting a sentence with a number. Spell out numerals from one to nine, except followed by standard units of measure, and indefinite and appropriate measure period of time. Ordinal numbers should be treated as cardinal numbers (e.g. 8th, 18th). Exceptions are numbers in tables, figures, graphs, and those in parenthesis.

Fractions

Spell out and hyphenate fractions (e.g. two-thirds). Exceptions are fractions in tables, figures, graphs, legends and those in parenthesis.

Unit and Symbols

Use recommended SI units and symbols. Use exponents instead of slash (e.g. kg ha⁻¹). Use words when unit of measure is not involved (e.g. grams per panicle). In the case of range of values, indicate the unit at the end of the range (e.g. 10-15 t ha⁻¹).

Avoid beginning a sentence with a symbol. Use percent symbol (%) with figures only (e.g. 5%), spell it out (percent) with written numbers. Indicate the US\$ equivalent of other currencies at the first mention in the text, or indicate in a footnote in a table or a figure, if applicable.

Abbreviations and Acronyms

Spell out abbreviations and acronyms the first time they are used in the text (e.g. ATP for Adenosine Triphosphate, HYV for High Yielding Varieties). Spell out abbreviations that are not generally known or specifically used in the paper at the first mentioned in the text. Commonly used abbreviations (e.g. ANOVA, DMRT, IQ, LSD, SD etc.) need not be spelled out. For scientific names, shorten the generic name to the first letter followed by the species, by the 2nd time they are used. Spell out units of measure with five or less letters (when singular) as year, month, etc., except when preceded by a numeral from measurement. Abbreviate minute (min.), second (s), hectare (ha), kilometer (k) and the rest, particularly for SI units. No period is needed at the end of each abbreviation and do not add "s" to the plural form.

6.1.e Journal Submission

A manuscript can be submitted via the journal website https://journals.usm.edu.ph or sent as an email attachment to the journal (jardet@usm.edu.ph for JARDET, and snaps@usm.edu.ph for SNAPS). Each manuscript is assigned a unique article ID upon receipt by the editorial staff. The full submission process is shown in Figure 6.

6.1.f Refereeing and Editing

A manuscript received by the journal undergoes first screening (pre-review) by the Editor-in-Chief (EiC) for basic science and format. If extensive corrections are required (e.g., to bring the manuscript into JARDET style), manuscripts are returned to the author for revision prior to being sent out for review. Referees are chosen by the EIC or by associate editors or members of the editorial board. The manuscript is then sent to the two reviewers in a double blind review process if found sufficient in form.

6.1.g Proof and Reprints

Galley proofs are sent to the corresponding author along with the Copyright Form. It is the responsibility of authors to carefully read the proofs and to return them promptly to the Managing Editor (within 72 hours of receipt). Authors should answer all questions from the printer and technical editor. Corrected proofs are uploaded in the journal's website and tagged as "article in press" until issue and page assignments are finalized by the editorial team.

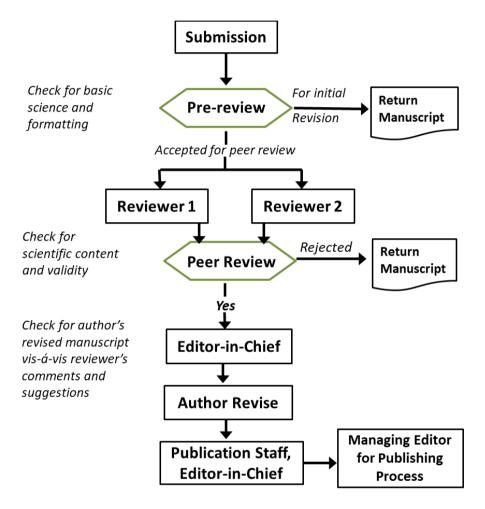


Figure 6. Journal submission flow-chart

6.1.h Confidentiality

Publication Staff are expected to respect and uphold the confidential status of materials submitted to the Journal and should ensure that material remains confidential.

6.1.i Conflicts of interest

The conflict of interest should be declared on the cover letter or on the manuscript submission form in the journal's online peer-review system. If there is no disclosure, the following statement will be published: "No potential conflict of interest was reported by the authors."

6.1.j Copyright and Permissions

The University applies <u>Creative Commons Attribution-NonCommercial-NoDerivatives (CC BY-NC-ND) license</u> to all published manuscripts. Prior to publication, authors provide a formal written Consent to Publish and Transfer of Copyright form. The signed Consent ensures that the University of Southern Mindanao ("the Publisher") has the Author's permission to publish the relevant Contribution. The signed Transfer entitles the Publisher on behalf of the Author to protect the Contribution against unauthorized use, and to authorize the Publisher to disseminate the Contribution by means of archiving in the USM journal website, offprints, legitimate photocopies, microform editions, reprints, translations, and secondary information sources such as abstracting and indexing services including databases.

The author warrants that the article is an original work not published elsewhere in whole or in part, except in abstract form, and that the author has full power to make this grant.

Authors and co-authors retain the right to revise, adapt, modify, or otherwise use all or part of the article in future works of the author(s), such as press releases, lectures, and reviews, provided that all such use is for the personal non-commercial benefit of the author(s). All patent rights are retained by the author(s).

6.2 Guidelines for Publication

Following the outcome-based modality of a University, the RDE sector of the USM is tasked to envision that all research and extension output should end up in global competitiveness and presence. This can only be attained if the output will be documented and published in legitimate peer-reviewed publications.

6.2.a Legitimate Publications

There is a large number of publishers who claim that their journals are peer-reviewed even when they are not. Such claims of peer-review on a journal's information page or website does not automatically guarantee legitimacy. As such, all potential authors are expected to submit an Application for Intent to Publish (Appendix 25) to the URDEC through the RPSO prior to submission to a journal. The form was approved by the BOR through Resolution 38 s2020. The RPSO Director shall consult the Thomson Reuters Master Journal List and Scopus to determine the legitimacy of the journal. The RPSO shall evaluate the legitimacy of each journal based on information regarding the journal publisher, editorial team, and publication outputs in the said journal. For journals indexed neither in Thomson Reuters Master Journal List nor in Scopus, Reviewers' reports shall be required; otherwise, reviewers' reports may also be requested as an additional tool for verification.

6.2.b Local Publications

Local publications are legitimate journals that are published by a Philippine publisher. Articles must have undergone a process of peer review.

6.2.c International Publications

For a journal to be considered as an international refereed it should by indexed by the ISI Thomson Reuters and/or Scopus. Journals indexed in these lists are considered international even if they are published by a Philippine publisher. Articles must have undergone a process of peer review.

7. POLICIES AND GUIDELINES

7.1 Student Theses

7.1.a Thesis Adviser

Qualifications:

- 1. Must be at least a Master's degree holder for undergraduate or Master's students; and must be a Doctoral degree holder for Doctoral students;
- 2. Must have the expertise in the research area. If the research study is multidisciplinary, a co-adviser may be added in the guidance committee.
- 3. Must come from the same department concerned while the co-adviser (if there is any) may come from either the same department or other Department/College.

Duties:

- 1. guides the student in conceptualizing and designing the research;
- 2. suggests experts and available literatures on the research topic;
- 3. checks the format and content of the research.
- 4. gives the go-signal if the student is ready to defend the proposal/manuscript;
- 5. guides and reminds the student regarding procedures and deadlines;
- 6. closely supervises and monitors the progress of the student's work;
- 7. ensures that the recommendations given during the proposal and final defense are implemented/followed by the student;
- 7. ensures that the rules governing plagiarism are strictly observed; and
- 8. indexes the thesis in the RDE indexing system.

7.1.b Thesis Guidance Committee

Composition:

For undergraduate students, the thesis guidance committee should be composed of the following: Thesis Adviser, Co-adviser (if applicable), Department Research Coordinator and Department Chairperson.

For graduate students, the thesis guidance committee should be composed of the major adviser, minor adviser, chair of the examining committee, together with one or two members of the examining committee for Master's and Doctoral degree students, respectively.

Duties:

- 1. The thesis adviser is responsible for supervising the research and directing the writing. The committee members (including the thesis adviser) should guide the student and determine that the thesis meets the appropriate scholarly standard.
- 2. When the committee members are satisfied with the scope and quality of the thesis, they sign the approval page. For purposes of appearance and reproduction, all signatures must be in blue ink.
- 3. The signatures of the thesis adviser and guidance committee members on the approval page signify the Department's acceptance of the final document. Signature of the Dean of the College on the thesis cover sheet signifies the official approval of the University of Southern Mindanao.

7.1.d Thesis Examining Committee

Composition:

For undergraduate students, the thesis examining committee should be composed of the following: Thesis Adviser, Department Research Coordinator, 2-3 technical experts.

For graduate students, the thesis examining committee should be composed of the chair of the examining committee, together with one or two members of the examining committee for Master's and Doctoral degree students, respectively.

Duties:

The thesis examining committee shall have the following functions:

- 1. provides ideas and suggests additional or new avenues of research or creative development;
- 2. attends all scheduled committee meetings to keep abreast of the student's progress and the suggestions made by other committee members;
- 3. reads and evaluates preliminary draft as necessary;
- 4. reads and evaluates the final draft;
- 5. participates in the defense;
- assists the thesis adviser in ensuring that the manuscript that is submitted to the college concerned is written in correct Standard Written English, is formatted correctly according to the approved USM Research Handbook, and is free of factual errors, and;
- 7. may give suggestions during defense and together with the adviser gives the final decision.

Note: ● Anybody from the department may be allowed to sit during the defense as observer. Only the members of the guidance committee are authorized to ask questions, give recommendations and suggestions.

• All thesis (outline and manuscript) defense will be allowed only in the presence of the adviser.

• Change of adviser will only be allowed on a very extreme case (adviser: on leave, retirement, delinquency, incapacitated due to sickness). However, proper protocol should be strictly followed (use of change of adviser form).

7.1.e Thesis Load of Faculty (student : adviser ratio)

- 1. Equal sharing of student-adviser ratio should be strictly followed. Student advisees should be equally divided among the faculty members per department. As much as possible no faculty will be given monopoly of advisement.
- 2. Group thesis is discouraged in the undergraduate level, and not allowed in the graduate level. This is to enhance student's personal know-how on research methodology, application, writing skills, and report preparation.
- 3. Adviser and advisee should be creative enough in crafting research problems that will not entail much expense.
- 4. Group thesis will be allowed only in exceptional cases and will be subjected first to preliminary evaluation of the University Research, Development Extension (URDEC).
- 5. Case studies/feasibility studies are exempted from checking and recording in the Research and Development Office (RDO). Approval and recording will be up to the college level only.

7.1.f Oral Defense and Conduct of the Study

Purpose. The purpose of the thesis defense is to provide an opportunity: (a) for the committee and others to discuss and interact together, and with the student on the research; (b) for scholarly debate, when appropriate; (c) to share new research with the educational community; (d) to assess the student's ability to express him/herself orally in an academic forum; and (e) to provide evidence through the written document of the student's research skills and writing ability.

Scheduling a Thesis Defense. Scheduling of the thesis defense must be approved by the student's thesis guidance committee and the chairman of the department.

Thesis Defense. The defense of the thesis is limited to the examining committee. A common format requires the student to present a rationale for the project describing the process, methods and outcomes, followed by discussion and/or questions about the project. The students shall prepare their visual materials for smooth presentation of their thesis.

Defense of Thesis Outline

- 1. Approved application for oral defense should be accomplished three days before actual oral defense.
- 2. Oral defense is done before final processing of the thesis outline.

Defense of Thesis Manuscript

- 1. The research manuscript should be checked thoroughly by the adviser before the student is allowed to have a defense.
- 2. The student submits the copy of the manuscript to the committee at least 5 days before the scheduled defense.
- 3. Examination Results. At this point, the student is asked to leave the room and the examining committee decides on the result. The possible results are:
 - Pass with no revisions/minor thesis revision
 - Fail A student may be re-examined once.

Results of the thesis defense are recorded on the Thesis Defense form and submitted to the College Research Coordinator before the deadline specified.

7.1.i Submission of Thesis

The thesis outline should be checked for similarity, approved by the thesis guidance committee, accepted by the thesis examining committee, indexed by the adviser, and submitted to the department research coordinator before the research is conducted. The soft copy of the thesis outline should be submitted to the Adviser, Department Research Coordinator, and College Research Coordinator. The student is required to submit one (1) soft bound thesis outline to the Department Research Coordinator.

The manuscript should be checked for similarity, indexed, and duly signed by the thesis guidance committee and thesis examining committee. The student is required to submit one (1) hard bound manuscript within a specified deadline given by the unit/college concerned. Soft copy of the thesis manuscript should be submitted to the Adviser to be uploaded in the RDEIS, to the Department Research Coordinator and College Research Coordinator Research.

7.1. Thesis Quality, Content and Originality

The thesis must meet acceptable standards of quality, in both content and form, as determined by the thesis adviser and research coordinator before it is approved by the student's examining committee. Further, plagiarism and the use of AI in outlines, manuscripts, dissertations, and other research outputs shall adhere to the policies in Section 3.5.h.

Theses should contain, at the minimum, the following sections: Introduction, Review of Related Literature, Methodology, Results and Discussion, and Conclusion.

The introduction should clearly and succinctly state the rationale and significance of the study, based on the researcher's context (for applied studies) and the scholarly literature. All variables relevant to the study must be operationally defined. The literature should be primarily based on legitimate references from the past ten years, except for seminal studies that are still relevant to the current context. The methodology section should include detailed information. For studies involving laboratory procedures, all relevant specifications (e.g., physico-chemical components, laboratory set-up, weather conditions) must be indicated. For studies involving human participants, the context, population, sampling procedure, and research instrument must be explicitly stated. In the results, if tables are included, paragraphs

should not be mere repetitions of the values of the tables but should focus on data interpretation. Further, the discussion should not be a mere listing of references and how they are similar to or different from the results of the current study. Instead, the discussion should provide an explanation of the results, based on the scholarly literature.

7.1.k Style Guide

Each college is mandated to use the ISO enrolled forms and template provided by the Research and Development Office for consistency and uniformity. All enrolled forms are available in the USM RDE website (https://www.usm.edu.ph/rde/).

7.1.k.1 Referencing and Referencing Tools

For references, the University shall use American Psychological Association (APA) (latest edition, 7th ed. as of 2023) style in all student theses and publications, except those in disciplines (mathematics, physics, etc.) where the American Mathematical Society (AMS) style is the norm. In both styles, four elements are included: **author/s**, **date**, **title**, and **source**. It is the author's responsibility to find all these elements in the reference cited, and to maintain the consistency between the in-text citations and the end list of literature cited.

The University encourages the use of a reference manager such as Zotero for APA style and of Latex for AMS style. These tools can help students present citations in the correct format and ensure that all references cited in the text appear in the reference list.

7.1.k.2 American Psychological Association (APA) reference style

In-text citations. All information taken from other sources should be properly cited. Whether you write a paraphrase or a direct quote, proper citation must be performed. Reference should be cited in the text by the last name of the author (both authors when only two; first author et al. when more than two) and year, for example (Morina & Franklin, 2023; Schott et al., 2023). Further, citations may be part of a sentence (narrative citation) or not (parenthetical citation).

Narrative in-text citation. These are citations that are part of a sentence. Use the word "and" if there are two authors. For example:

Santos and Lopez (2023) said that the duck flew over the moon.

Parenthetical in-text citations. These are citations that are not part of a sentence. Use the ampersand "&" if there are two authors. For example:

The duck flew over the moon (Santos & Lopez, 2023).

DOIs and URLs. Many texts now have a digital object identifier (DOI) or uniform resource locator (URL). For all works with DOIs, the DOI should be included in the reference. For all works with URL but no DOI, provide the URL in the reference. These should be presented as hyperlinks that lead readers directly to the content (i.e., a user who clicks on the DOI or URL in the paper must be automatically directed to the source).

Reference list. The reference list at the end of the manuscript must be presented in alphabetical order based on the first letter of the surname of the first author. If there are two works by the same author but different second author, they shall be alphabetically arranged

by the surname of the second author. If there are two works by the same set of authors, these shall be arranged by year, from earliest to latest. If there are two works by the same set of authors and the same year, a letter shall be written after the year, such as 2023a and 2023b.

The formatting of references depends on the category of the source, whether it is a journal, book, website, etc. Examples are shown below.

Zotero short-cuts. For some references, Zotero can fill in the fields automatically. If your source has an ISBN or DOI, click "Add Items by Identifier" and type the ISBN or DOI. If your source is a website, you can add it to Zotero but you need to install the Zotero connector (https://www.zotero.org/download/) for your web browser. After download, you should see a Zotero icon on the upper right side. If you cannot see it, click on the puzzle-like icon, then select Options to pin Zotero to the toolbar.

| Type of reference | Example | Zotero Guide |
|--------------------|--|---|
| Journal | Junatas, K. & Molina, E. (2021). Anthelmintic resistance of gastro- intestinal nematodes to albendazole, levamisole and ivermectin in Murrah buffaloes. Journal of Agricultural Research, Development, Extension and Technology, 3(1), 55-59. Parenthetical citation: (Junatas & Molina 2021) Narrative citation: Junatas and Molina (2021) | If a DOI exists, click "Add Items by Identifier" and type/paste the DOI. This will automatically fill in all relevant fields. If no DOI exists: - Add "Journal Article" Enter information for: - Title of article: Use capital letter only for the first letter of the first word - Journal title: Use capital letter for all the first letters of all major words - Date: year only - Volume - Issue - Page numbers |
| Book (with author) | Stemhagen, K. & Henney, C. (2021). Democracy and mathematics education: Rethinking school math for our troubled times. Routledge. Parenthetical citation: (Stemhagen & Henney, 2021) Narrative citation: Stemhagen and Henney (2021) | If an ISBN exists, click "Add Items by Identifier" and type/paste the ISBN. This will automatically fill in all relevant fields. If no ISBN exists: Add "Book" Enter information for: Title: Use capital letter only for the first letter of the first word Author Date: year only Edition (2nd, 3rd, etc) Publisher |

| Type of reference | Example | Zotero Guide | |
|--|---|---|--|
| Book (with editor) | Glover, F. & Kochenberger, G. A. (Eds.) (2003). <i>Handbook of metaheuristics.</i> Springer. Parenthetical citation: (Glover & Kochenberger, 2003) Narrative citation: Glover and Kochenberger (2003) | If an ISBN exists, click "Add Items by Identifier" and type/paste the ISBN. This will automatically fill in all relevant fields. If no ISBN exists: Add "Book" Enter information for: Title: Use capital letter only for the first letter of the first word Editor (change the "Author" field to Editor) Date: year only Edition (2nd, 3rd, etc) Publisher | |
| Book Chapter | Nilsson, P., Schindler, M., & Bakker, A. (2018). The nature and use of theories in statistics education. In D. Ben-Zvi, K. Makar, & J. Garfield (Eds.), International handbook of research in statistics education (pp. 359–386). Springer. Parenthetical citation: (Nilsson et el., 2018) Narrative citation: Nilsson et al. (2018) | If a DOI for the chapter exists, click "Add Items by Identifier" and type/paste the DOI. This will automatically fill in all relevant fields. If no DOI exists: Add "Book Section" Enter information for: Title (chapter title): Use capital letter only for the first letter of the first word Book title: Use capital letter only for the first letter of the first word Author Editor (change the "Author" field to Editor) Date: year only Edition (2nd, 3rd, etc) Pages (e.g., 359-386) Publisher DOI (if any), in the "Extra" field. Type "DOI:" | |
| Paper or poster presentation (published as a journal or book) | Follow the same format as journal, book, edited book, or book chapter (see examples above), whichever the case may be. | | |

| Type of reference | Example | Zotero Guide | |
|--|---|---|--|
| Paper or poster presentation (not published) | Kazima, M. (2021, July 11-18). Mathematical work of teaching in a multilingual context [Paper presentation]. 14th International Congress on Mathematics Education, Shanghai, China. Parenthetical citation: (Kazima, 2021) Narrative citation: Kazima (2021) | If a DOI for the reference, click "Add Items by Identifier" and type/paste the DOI. This will automatically fill in all relevant fields. If no DOI exists: Add "Presentation" Enter information for: Title: Use capital letter only for the first letter of the first word Presenter Type (write: Paper presentation or Poster presentation, whichever the case may be) Date Place (city and country) Meeting name (type the conference name here) Note: In the reference list, manually type the full duration of the conference (in our example, 2021, July 11-18), even if the presentation probably occurred in only one of the conference days. Add "Thesis" Enter information for: Title: Use capital letter only for the first letter of the first word Author Type (write: Unpublished bachelor's thesis, Unpublished master's thesis or Unpublished doctoral dissertation, whichever the case may be, followed by a comma and then the university) University: do NOT write anything in University: Instead, write the university in "Type" (see underlined text above above) Date: year only URL: Type the link to the thesis. When the user clicks the link, then he or she is directed to the thesis | |
| Dissertation or theses available online | Cui, Y. (2023). Understanding the effects of particle properties and particle-scale flow on suspension rheology [Doctoral dissertation, The University of Edinburgh]. https://era.ed.ac.uk/bitstream/handle/1842/40842/CuiY 2023.pdf?sequence=3&isAllowed=y | | |

| Type of reference | Example | Zotero Guide | |
|--|---|---|--|
| Unpublished dissertation or thesis (such as what you can find in the library) | Adamat, A. W. P. (2023). African swine fever (ASF) detection using nanogold biosensor as basis for repopulation in swine farms. [Unpublished master's thesis]. University of Southern Mindanao. Parenthetical citation: (Adamat, 2023) Narrative citation: Adamat (2023) | Add "Thesis" Enter information for: Title: Use capital letter only for the first letter of the first word Author Type (write: Unpublished bachelor's thesis, Unpublished master's thesis or Unpublished doctoral dissertation, whichever the case may be) University Date: year only | |
| Webpage on a news website | Ramirez, R. (2022, February 28). 'Delay means death': We're running out of ways to adapt to the climate crisis, new report shows. Here are the key takeaways. CNN. https://edition.cnn.com/2022/02/28/world/un-ipcc-climate-report-adaptation-impacts/index.html Parenthetical citation: (Ramirez, 2023) Narrative citation: Ramirez (2023) | Add the article via the Zotero web connector. Make sure your browser is installed. Author Website title: write here the news outlet (e.g., CNN, BBC, etc) Date (full date, if available) URL: Type the link to the online article. When the user clicks the link, then he or she is directed to the thesis Please double-check the info automatically created and manually override if needed. | |
| Webpage with a group author | Philippine Statistics Authority. (2023, June 27). Three in every five families owned the house and lot they occupied. https://psa.gov.ph/statistics/income-expenditure/apis Parenthetical citation: (Philippine Statistics Authority, 2023) Narrative citation: Philippine Statistics Authority (2023) | Add the article via the Zotero web connector. Make sure your browser is installed. Author Date (full date, if available) URL: Type the link to the online article. When the user clicks the link, then he or she is directed to the thesis Please double-check the info automatically created and manually override if needed. | |
| Website with no date | United Nations Children's Fund. (n.d.). Social policy and governance. https://www.unicef.org/philippines/ social-policy-and-governance Parenthetical citation: (United Nations Children's Fund, n.d.) Narrative citation: United Nations Children's Fund (n.d.) | Add the article via the Zotero web connector. Make sure your browser is installed. Author Date (full date, if available) URL: Type the link to the online article. When the user clicks the link, then he or she is directed to the thesis Please double-check the info automatically created and manually override if needed. | |

7.1.k.3 American Mathematical Society (AMS) Style

AMS employs a numbering system for in-text citations; that is, references in the reference list are enumerated in the order that they appear in the text, and consecutively numbered [1], [2], ... and so on.

Samples for various reference types are shown in the following table. Built-in codes in Latex may be used for references.

| Reference Type | Information needed | Examples |
|----------------|--|--|
| Journal | Author's name as it appears, <i>Title of article</i> . Shortened Journal Title. Volume Number (Year of publication), issue number, page range, DOI. | Meng An and Haixiang Zhang, High- Dimensional Mediation Analysis for Time-to-Event Outcomes with Additive Hazards Model. Math. 11(2023), 24, 4891, https://doi.org/10.3390/math112448 91 |
| | | Jakub Przybyło, <i>On triangle-free list assignments.</i> Disc. Math. 347 (2024), 113779, https://doi.org/10.1016/j.disc.2023.1 13779 |
| Book | Author's name as it appears, <i>Title of book</i> . Publisher, City of publication, Year of publication. | Tommy R. Jensen and Bjarne Toft, <i>Graph coloring problems</i> . John Wiley & Sons, New York, 1995. |
| | | Zoran Stanić, Inequalities for graph eigenvalues. Cambridge University Press, Cambridge, 2015. |
| Website | Author's name as it appears, <i>Title of article</i> . URL, year. | Nikhil Bansal, Anupam Gupta, and Guru Guruganesh, <i>On the Lovász</i> <i>theta function for independent sets</i> <i>in sparse graphs</i> , https://epubs.siam.org/doi/10.1137/ 15M1051002, 2018. |

7.1.I Grading Scheme

In cases of uncompleted but on-going thesis activities, a grade of IP (In Progress) may be given to the student subject to the policies of the Admission and Records Office (ARO).

7.2 Statistical Guidelines

It is the policy of this University to encourage students to conduct statistical analysis on their own as much as possible, seeking guidance only when confronted with the more complex statistical analysis.

Outline/Proposal Preparation

- 1. All student research that involves quantitative data must be subjected to statistical analysis.
- 2. All student research must be thoroughly planned by the student and his/her adviser.
- 3. Statistical analysis and interpretation shall be done by the student researcher himself/herself under the close supervision of his/her adviser or designated statistician.
- 4. If students are not able to conduct statistical analysis on their own, then they may consult any statistician or faculty who could prescribe and evaluate analyses and interpretations of data.
- 5. All survey questionnaires and interview schedules must undergo tests on validity and reliability using appropriate tools after conducting pretesting of the research instrument; such test may be performed under the guidance of a member of the Statistical Pool.
- 6. Presentation of results through graphs, tables and other types of presentation may be done by the researcher but it shall be confirmed or noted by his/her adviser.
- 7. There are required or minimum number of cases, observations, respondents and samples or experimental units required for a particular statistical test. Always comply with the required number of cases,
- 8. The student is expected to analyze their data independently or with his/her adviser.
- 9. Honoraria for the guidance committee and statistician, if any, are subject to the officially approved fees for the academic term.

7.3 Thesis Honorarium

The approved honorarium for undergraduate and graduate theses are as follows:

Guidance committee (undergraduate level):

| | | Rate per Outline/Manuscript | |
|----|-------------------------------------|-----------------------------|------------|
| | | Outline | Manuscript |
| a. | Adviser (if without English critic) | 500.00 | 1000.00 |
| b. | Adviser (if with English critic) | 350.00 | 700.00 |
| c. | English critic | 250.00 | 350.00 |
| d. | Co-adviser | 300.00 | 600.00 |
| e. | Statistician | 300.00 | 300.00 |
| f. | Panel | 300.00 | 300.00 |
| g. | Dept. Research coordinator | 250.00 | 250.00 |

Guidance committee (graduate level - Master's):

| | | Rate per Outline/Manuscript | |
|----|-----------------------------------|-----------------------------|------------|
| | | Outline | Manuscript |
| a. | Adviser (chair) | 3,000.00 | 4,000.00 |
| b. | Adviser (minor) | 2,000.00 | 3,000.00 |
| c. | Examining committee (chair) | 2,000.00 | 3,000.00 |
| d. | Examining committee (member) | 1,000.00 | 2,000.00 |
| e. | Thesis outline prep & defense fee | 50.00 | 50.00 |

| To | tal (excluding statistician) | 8,050.00 | 12,050.00 |
|----|------------------------------|----------|-----------|
| f. | Statistician (optional) | 500.00 | 1,000.00 |

Guidance committee (graduate level - Doctoral):

| | | Rate per Outline/Manuscript | |
|----|-----------------------------------|-----------------------------|------------|
| | | Outline | Manuscript |
| a. | Adviser (chair) | 4,500.00 | 6,500.00 |
| b. | Adviser (minor) | 3,000.00 | 4,000.00 |
| c. | Examining committee (chair) | 3,000.00 | 4,000.00 |
| d. | Examining committee (member) (2) | 2,000.00 | 3,000.00 |
| e. | Thesis outline prep & defense fee | 100.00 | 100.00 |
| f. | Statistician (optional) | 500.00 | 500.00 |
| To | tal (excluding statistician) | 14,600.00 | 20,600.00 |

The examining committee for the outline is expected to commit to guide the student for the manuscript to ensure adherence, continuity and consistency. The rate for statistician is for consultation and exclusive of data analysis and interpretation.

7.4 Publication Incentives

Categories of publications qualified for awards are provided in BOR Resolution 143 s2022. Financial incentives shall be granted only for peer-reviewed materials. Publications that may qualify for incentives include journal articles, research-based books, book chapters, brief articles, notes and other similar articles, and conference proceedings indexed by Web of Science or Scopus, provided that the publication underwent the process of peer review, and that the "University of Southern Mindanao" is an indicated affiliation of the USM author in the paper. Further, it is expected that all authors adhere to the criteria for authorship set by the International Committee of Medical Journal Editors.

Publication Incentives for Faculty and Staff

BOR Resolution 088 s2016 specifies the incentives for faculty and staff as follows:

- PhP 50,000 for full articles published in a journal indexed by Web of Science or Scopus.
- PhP 20,000 for other articles.

The publication awards for faculty shall be allocated as follows (URDEC Resolution No. 005 series of 2017):

- 50% of the cash award shall be given to the senior/main author
- remaining 50% shall be divided equally among the other co-authors

BOR Resolution 093 s2017 stipulates that faculty members shall not present or publish student theses under their own names.

Publication Incentives for Students

BOR Resolution 55-C s2023 specifies the incentives for USM students and their USM faculty co-authors as follows:

- PhP 30,000 for full articles published in a journal indexed by Web of Science or Scopus.
- PhP 15,000 for other articles.

In the case of student incentives, the student shall also present evidence that the research data upon which the publication is based should have been gathered while the student was still enrolled in USM. All co-authors in publications based on student research shall receive publication incentives based on their percentage contribution to the publication.

Policies may be subject to possible revisions as may be approved in the future.

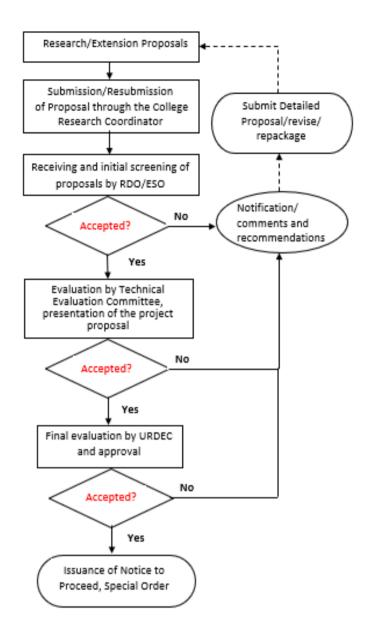
7.5 Research, Development and Extension (RDE) with Limited Funding

- Faculty members in the university are research-driven, however, competition for research funding is high.
- · While there are good quality RDE proposals, some are not within the priority scope of the funding agency.
- There are RDE projects which do not require expensive equipment and other materials, thus limited support would be sufficient for project implementation.
- RDE with limited funding refers to the research, development and extension projects of the faculty without the university grant but still supported by the university.
- Faculty members who are not applying for a university grant but rather wish to do RDE at their own expense, and with limited support from the University could apply on this scheme.
- Faculty researchers with limited funding could utilize portion of their official working time in research as specified in their workplan and allowed to utilize the available resources of the university.
- RDE financed by third parties with outputs owned by the third parties are not considered under this research scheme.
- · Projects of faculty researcher with limited funding do not utilize the student thesis.
- · Research with limited funding is for novice faculty researcher to give them opportunity to do RDE and later could apply for research grant. Faculty researcher is granted only once with this research scheme.
- · RDE proposals for Limited Funding shall pass through evaluation of the technical evaluation committee and URDEC.
- · RDE projects in this scheme are also monitored and researchers are required to submit the narrative report (Appendix 21) quarterly progress report (Appendix 22) and to present their outputs in the university in-house review and research fora.

Flow of the RDE proposal processing for research with limited funding:

- 1. Proponent submits the proposals to the RDO/ESO through channel (cover letter with notation from the College Research Coordinator)
- 2. RDO/ESO records receipt of incoming proposals and conducts initial screening.
- 3. If the proposal is incomplete or needs refocus the proponent will be informed of the comments and recommendation. The proposal will be revised and resubmitted.
- 4. The proposals which passed the initial screening are subjected to the Technical Evaluation Committee. A notice of meeting is issued to the proponent for presentation of the proposed project. A panel of expert will be identified by RDO/ESO.
- 5. If the proposal needs refocus, revision or repackage, the proponent will be informed of the comments and recommendations. The proposal will be revised and resubmitted.
- 6. The proposal will be reviewed by URDEC for final evaluation prior to approval.
- 7. When the proposal is approved, the Notice to Proceed and the Special Order will be issued. If the proposal needs refocus, revision or repackage, the proponent will be informed of the comments and recommendations. The proposal will be revised and resubmitted.

Flow of RD&E proposal processing for research with limited funding



7.6 Paper Presentation Policy and Guidelines

A paper/abstract for National and International Presentation must be an outcome of some research work done thus plays a role in professional growth.

Purpose: An opportunity to disseminate and share the outcome of a scholarly work/research output and can also be a way of an academic exercise to share the past work.

Guidelines

- 1) The paper has been accepted in a legitimate & prestigious scientific conference for presentation.
- 2) The applicant should submit the request for financial assistance to present the paper in conference, attached with an abstract and accepted official invitation to the University Research, Development, and Extension Committee (URDEC) Chair.

- 3) The URDEC Chair will forward the document to the members of URDEC for review and endorsement.
- 4) Have passed the Plagiarism test conducted by the Research and Development Office (RDO)
- 5) Should apply two months prior to the presentation in order for URDEC to have a lead time of two (2) months for evaluation before conference/ presentation.
- 6) Main author should present the paper or in the absence of the main author, there should be a written consent by the main author assigning the co-author to present in her/his behalf.
- 7) Financial assistance will be on a first come first served basis & subject to availability of funds with a maximum of Php 10,000/faculty/year.
- 8) Financial assistance can be granted once a year per faculty/researcher.
- 9) In cases of no financial assistance required, the faculty can present in several for approvided the travel order is approved.

7.7 Classification of R&D programs/projects (DOST, 2020)

Research and development (R&D) is a systematic creative work that contributes to the body of knowledge, including knowledge of man, culture and society, and the use of these knowledge to devise new applications through the conduct of the following activities:

- Fundamental/Basic Research—refers to experimental or theoretical work undertaken primarily to acquire new knowledge on underlying phenomena and observable facts. This can either be (a) without immediate or specific application (fundamental research) or (b) geared to come up with information toward the solution of a specific problem that has not been solved before (oriented basic research). This category includes natural and social sciences among other areas.
- 2. Applied Research-refers to investigation undertaken in order to utilize data/information gathered from fundamental/basic research or to acquire new knowledge directed primarily towards a specific practical aim or objective with direct benefit to society.
- 3. Experimental Development—refers to systematic work that draws from existing knowledge gained from research and/or practical experience that is directed to produce new materials, products and devices, install new processes, systems and services, and substantially improve those already produced or installed.
- 4. Pilot Testing—refers to innovative scaled-up (greater than laboratory or bench scale) activity aimed at gaining experience that may lead to further technical improvement of product or production process, and setting the parameters before the technology transfer of the process/product and design of equipment.

7.8 Guidelines and Criteria for Paper and Poster Presentation in the in-house Review

7.8.a Presentation/Powerpoint Guidelines

For the Faculty and Researchers' Midyear Year-end In-house Review, the presentation must

- 1. Should be clear in the beginning, middle and end of the presentation
- 2. Avoid too much detail
- 3. Use Font Arial or Times New Roman, font size at least 32
- 4. Exclude details that the audience does not need or cannot remember
- 5. Present the data in a clear way
- 6. Graphs should have labels and viewgraphs should be obvious (if any).
- 7. Include slides that accent important details
- 8. Include very brief research highlights. It should be in bullet type (6 lines per slide)
- 9. Be explained thoroughly, without reading the whole presentation from notes
- 10. Not be in paragraph form
- 11. Be within 10-15 minutes, depending on the scheduling arranged by the Program Committee, and subjected to an open forum after each speaker or after each group of speakers
- 12. Must contain the following information: Title, proponents, duration, and fund source; Basic information (category, if program/project, etc; college/unit; thematic area; status, if completed or not completed; total budget); Rationale; Objectives; Expected Output; Methodology; Accomplishments; Potential Impact; Problems Met and Recommended Action; Workplan; Budget Utilization
- 13. must be uploaded to a Google Drive specified by the RDO at least one day before the session.

7.8.b Criteria for Best Paper

| Crite | eria | Maximum Points | Rating |
|-------|---|----------------|--------|
| 1. | Creativity and Technical Quality Clarity of research topic/problem Appropriateness of objectives Appropriateness and thoroughness of methodologies Adequacy of design and procedure Efficiency of design and procedure Organization and clarity of results and discussion Accuracy of conclusions | 35% | |
| 2. | Significance of Findings/Relevance of Research Contribution of knowledge/scientific advancement Relevance to regional thrust Contribution to productivity/relevance to S & T community Potential utility by end users | 25% 15% | |
| 3. | Manuscript/Write-up Organization Clarity and style Accuracy of information/figures Coherence and logic | 25% | |
| 4. | Presentation | 2370 | |
| ТОТ | -AL | 100% | |

7.8.c Criteria for Poster

Guidelines:

- 1. The poster should be well organized, concise, self-explanatory, attractive
- 2. Should fit in an illustration board (30x 40 inches)
- 3. Should include the following information: Title, Author(s) (names, address (unabbreviated), Brief Introduction, Objectives, Methodology, Results and Discussion, and Conclusion
- 4. Text should be readable from a distance of two meters
- 5. One of the authors should be stationed near his/her poster during Poster Session

| CRITERIA | MAXIMUM POINTS | RATING |
|--|--------------------------|--------|
| Significance of Findings Experimental organization/procedure Presentation (lay-out, color, etc.) Over-all quality | 30% 30% 30% 10% | |
| TOTAL | 100% | |

7.9 Entitlement for the benefits stipulated on the Magna Carta for Scientists, Engineers, Researchers, and Other Science and Technology (S & T) Personnel

The University encourages involvement of fulltime and faculty researchers to pursue excellence in scientific and technological activities.

The entitlement of the benefits stipulated on the Magna Carta for Scientists, Engineers, Researchers, and Other Science and Technology (S & T) Personnel are based on the following:

R.A. No. 8439 - "An act providing a magna carta for scientists, engineers, researchers and other science and technology personnel in government" which provides the policy on the provision of additional benefits for Scientists, Engineers, Researchers and Other Science and Technology Personnel in the Government for DOST personnel;

R.A. No. 11312 s. 2020 which was amended for the adoption of R.A. No. 8439 to the non-DOST agencies in government that are involved in scientific and technological activities;

R.A. 11312 s. 2020 Section 9 stipulated that an Agency Screening Committee must be constituted to assist the agency head in evaluating the qualification of each applicant for certification of eligibility.

The provision of benefits shall be based on the Joint Circular No. 1 series of 2013 (JC No. 1 s. 2013) entitled "Rules and Regulations on the Grant of Compensation-Related Magna Carta Benefits to Scientists, Engineers, Researchers, and Other Science and Technology (S & T) Personnel;

JC No. 1 s. 2013 Section 16 stipulated that amounts required for payment of Magna Carta benefits shall be charged to the respective agency appropriation/budgets and the augmentation thereof from any available savings of the agency concerned shall be subject to the approval by the DBM pursuant to Section 41 of R.A. No. 10325, and to the general provisions in subsequent General Appropriation Act (GAA).

Republic Act No. 11312 Series No. 1534, II. No 8734

An Act Strengthening the Magna Carta for Scientists, Engineers, Researchers and Other Science and Technology Personnel in the Government, Amending for the Purpose Republic Act No. 8439

Section 1. Section 7 of Republic Act No. 8439 is hereby amended to read as follows:

Sec. 7. Other Benefits. -Notwithstanding laws and issuances on Compensation and Position Classification System, and Salary Standardization in the Government, science and technology personnel defined under Section 5 of Republic Act No. 8439 shall receive the following:

1. Honorarium

· a form of remuneration for services rendered beyond the established regular workload those requested to organize, speak, lecture in seminars, workshops, conferences, symposia, trainings and classroom sessions those assigned to special projects of interagency/department or inter-committee nature

2. Share of Royalties

· a share in the proceeds of royalty payments arising from patents, copyrights and other intellectual property rights.

Intellectual Property Rights: Copyrights and related rights, Service marks, Geographic indications, Industrial designs, Patents, Layout designs of integrated circuits, Protection of undisclosed information, Innovations of inventions and utility models

• share shall be on 60% to 40% basis in favor of the government and the personnel involved in the technology/activity which has been produced

3. Hazard Allowance

- generally paid to officials and employees who are exposed to hazards, directly or indirectly, because of the nature and/or location of their work
- 10% to 30% of monthly basic salary depending on the nature and extent of the hazard involved

4. Subsistence Allowance

- a full subsistence allowance is equivalent to 3 meals a day or PhP 150.00 per day
- 50% or PhP 75.00 is for a half day service
- services less than 4 hours shall not entitle the employee to a subsistence allowance
- those assigned outside of their regular work stations are entitled for per diem instead of subsistence allowance (Executive Order No. 248 dated May 25, 1995)

5. Laundry Allowance

· personnel who wear the prescribed uniform during office hours shall be entitled to a laundry allowance of PhP 300.00 per month

6. Housing and Quarters Allowance

- · applies to S&T personnel who are on duty beyond office hours in laboratories, R&D centers and other government facilities
- free living quarters within the government facility if residence is outside of the 50 kilometer radius from the official station

7. Longevity Pay

5% of the monthly basic salary shall be paid to S&T personnel for every 5 years of continuous and meritorious service

8. Medical Examination

- compulsory free medical examination once a year and immunizations as the case may warrant
- health insurance package benefit such as complete physical examination; routine laboratory; chest X-ray and ECG; psychometric examination; and, dental examination, including hospital room and board, doctor's fee, surgeon's fee, and other related expenses

Section 2. Section 8 of Republic Act No. 8439 is hereby amended:

- Non-DOST S&T Personnel who are involved in research and development or other STA may avail the benefits provided under this Act upon certification of the Head of Agency
- Provided, that the Head of Agency shall abide by the guidelines promulgated by DOST for the certification.

DOST Administrative Order No. 009

Series of 2020

Guidelines in the Certification of Eligibility of Non-DOST S&T Personnel under Republic Act No. 8439, as Amended by Republic Act No. 11312

Coverage

• shall cover personnel in government agencies outside the DOST who are involved in scientific and technological activities (STA)

Policies

• any government S&T personnel not employed by the DOST may avail of the benefits under R.A. No. 8439 as amended, provided that such personnel are certified by the head of their respective agencies that they are engaged in STA

Authority to Certify S&T Personnel

• the Head of Agency such as the Secretary for the National Government Agencies (NGAs) or the President for State Colleges and Universities (SUCs)

Classification of STA

- 1. Research and Development (R&D)
- 2. Scientific and Technological Services (STS)
- 3. Scientific and Technical Education and Training (STET)

Classification of S&T Personnel

A. S&T Personnel may be categorized as:

- 1. S&T managers, supervisors, and planners;
- 2. Members of the Scientific Career System
- 3. Scientists, engineers, and researchers;
- 4. Personnel of R&D institutions and other government organization provided that:
- the STA and S&T-related functions of the agency are authorized by law or by competent authority;
- the personnel is actually involved in STA
- the position of the concerned personnel is part of the authorized staffing pattern of the organizational unit performing STA

B. S&T Managers, Supervisors and Planners

- are those who graduate degree holders or have at least 10 years of managerial experience; performing executive, planning and policy-making functions
- 1. S&T Managers are those who are directly supervising STA
- S&T Managers positions are with equivalent salary grades of 27 and above *Example:* Secretary, Undersecretary, Assistant Secretary, Executive Director, Director, Regional Director, Deputy Executive Director, Deputy Director Department Service Chief and others

2. S&T Supervisors

• S&T Supervisor positions are with equivalent salary grades of 22 and above Example: Associate Scientist, Assistant Scientist, Division Chief, Chief Science Research Specialist, Supervising Science Research Specialist and others

3. S&T Planners

- those who are directly supervising and spending at least 50% of their official time in S&T planning activities
- S&T Planner positions are with equivalent salary grades of 22 and above *Example:* Planning Officer IV , Project Development Officer IV, Project Evaluation Officer IV and others

C. Members of the Scientific Career System

- those who have been conferred the rank of Scientist in the Scientific Career System pursuant to EO Nos. 784 and 901 dated 17 March 1982 and 19 July 1983, respectively.
- D. Scientists, Engineers and Researchers and Other Personnel of R&D Institutions and Government Institutions
 - those who are employed in any public research and development institutes and government organizations;
 - who spend at least 50% of their official time in the conceptualization and application of scientific knowledge, and/or engineering and technological principles, products, processes, methods and systems;
 - at least undergraduate degree holders in any of natural science and engineering courses and involved in research and development or other STA.

Note: Natural science and engineering courses shall include but not limited to, basic/natural sciences and mathematics; engineering and information and communications technology; medical sciences and agricultural sciences under the Scientific Career System; physical anthropology; physical geography; library and archive sciences, and scientific and technical documentation as approved by the Scientific Career System (SCC).

Qualification Requirements

- 1. The agency where the S&T personnel is employed must be actively doing any or all of the S&T activities (defined in Item V);
- 2. The applicant must be an S&T personnel holding an S&T position;
- 3. The applicant must hold a Science, Technology, Engineering and Mathematics (STEM) degree courses listed under SCC; and,
- 4. The applicant and the division/unit where he/she is assigned should be directly involved in the conduct of one or a combination of S&T activities.

Documentary Requirements

- 1. Endorsement by the immediate supervisor
- 2. Functions of service/division/section/unit where the personnel belong as certified by the immediate supervisor or any competent authority
- 3. Description of actual duties and responsibilities with corresponding percentage time allocation as certified by the immediate supervisor or any competent authority
- 4. Certification of good standing issued by the SCC; and
- 5. Other relevant documents that may be required by the ASC in order to establish the qualifications of the applicant to be certified as S&T personnel.

Agency Screening Committee (ASC)

- composed of at least three (3) members to be designated by the Head of Agency (RDO Director, HRMDO Director and Dean of the College where the applicant belongs)
- Chairperson, who is preferably the Head of the R&D Unit of the agency (VPRDE); and
- Members who are at least holding a regular supervisory position or equivalent.

Procedure for Application

- 1. New Application
 - a. New applications (complete with required documents) shall be submitted to the ASC for evaluation;
 - b. ASC shall check the completeness of the application;
 - c. If documentary requirements are complete, the ASC shall proceed with the evaluation of the qualifications of the applicant. In case of deficiency in the documentary requirements to establish the eligibility of the applicant, ASC shall inform the applicant in writing;
 - d. ASC shall prepare and submit its report and recommendation to the Agency Head for consideration and approval;

e. Agency Head shall issue the Certificate of Eligibility if the applicant satisfies the requirements for certification. Otherwise, a Notice of Denial shall be issued to inform the applicant, detailing the grounds or reasons for the non-approval of the application.

2. Application for Renewal

- shall be acted upon before the expiration of the certificate
- Agency Heads may set a deadline for the submission of all applications for renewal

3. Remedies in case of Denial of Application

- the ASC shall notify the applicant in writing stating therein the reason/s for denial;
- the applicant may file a request for reconsideration with the ASC within five (5) working days from receipt of denial;
- a protest may also be filed with the Head of the Agency if the request for reconsideration is denied;
- protest must be submitted within five (5) working days from receipt of the notice of denial of the request for consideration;
- denial of protest by the Head of the Agency shall be final and executory.

An Agency Head whose application is denied may file a request for reconsideration to the head of supervising agency within a non-extendible period od seven(7) working days from receipt of the denial. The decision of the latter on the request for reconsideration shall be final and executory.

Effectivity of Certification

- entitlement of S&T personnel to the Magna Carta benefits, shall be upon the issuance of the Certificate of Eligibility
- certificate shall be valid for (1) year only and renewable every year thereafter subject to the ASC evaluation

Termination of Entitlement

· shall be terminated by reason of retirement, death, resignation, transfer, dismissal, reorganization, phase out activity, promotion to a non-STA position, change of position description, or such other analogous causes

Funding

· sourced from the agency's budget and subject to the provisions of the DBM-DOST Joint Circular No. 1, s. of 2013

Repealing Clause

· All DOST orders and issuances, or portions thereof, which are inconsistent with these guidelines, are hereby repealed, amended, or modified accordingly.

Effectivity

• This Order shall take effect fifteen (15) days upon publication in the Official Gazette or any news paper of general circulation.

7.10 Research Contract

Research Contract for Locally Funded Research (Sample Copy)

RESEARCH CONTRACT

| KNOW ALL MEN BY THESE PRESENTS: |
|---|
| This CONTRACT is made and entered into by and between: |
| of the University of Southern Mindanao at Kabacan, Cotabato, with principal office at the College of, USM, Kabacan, Cotabato, hereinafter to as researcher, |
| -and- |
| The University of Southern Mindanao (USM), a government office under Commission on Higher Education (CHED) created under the laws of the Republic of the Philippines, with principal office address at Kabacan, Cotabato, represented herein by its President,, and hereinafter referred to as USM. |
| WITNESSETH: |
| WHEREAS, the USM has the financial resources to support the research project/study of the researcher as contained in the research project/study proposal; |
| WHEREAS, the researcher possesses the expertise and management capability to undertake the research project/study as contained in the proposal; |
| Now, THEREFORE, in consideration of the above premises, the parties agreed as follows: |

Article I TITLE OF THE RESEARCH PROJECT/STUDY

The research project/study is entitled "On-Site Evaluation and Identification of Superior Rambutan Trees Grown from Seeds in Selected Areas in North Cotabato for Variety Release and Registration".

Article II RESEARCH WORK

Section 1. Bases for Implementation – The researcher shall conduct the research project/study in accordance with the approved proposal which shall form an integral part of this agreement.

Section 2. Log Frame – The schedule of the conduct of the project/study shall be set forth in a Work Plan which shall form an integral part of this contract. Delay or deviation in the implementation schedule based on the Log Frame shall not be allowed without the written consent of USM.

Article III FUNDING AND REPORTS

| | Section 1. Provision of Funds – The USM shall provide the funds in the total amo | unt |
|----|--|-----|
| of | for a period of | |

Section 2. Accounting and Auditing Procedures – All fund releases shall be subject to existing standards of accounting and auditing laws, rules and regulations of the government.

Section 3. Forms and documents for reports – The researcher shall accomplish such forms and documents as may be required by USM for monitoring and record-keeping purposes.

Section 4. Terminal Report – The researcher shall submit to USM c/o Research and Development Office five (5) copies and one (1) e-copy of the Terminal Report and other necessary requirements 45 days after the termination of the project/study.

Article IV PUBLICATION

Section 1. The University requires that researcher engaged in the project/study should present the results in the USM R, D and E In House Review and other symposia. Moreover, the University requires that the research output be published in the USM R & D Journal or any other referred Journal. Honoraria for the last quarter shall be given only after the researcher shall have submitted a copy of the article to be published and accepted by the editor-in-chief of the Journal.

Article V INTELLECTUAL PROPERTY RIGHTS

Section 1. Intellectual Property Rights – All data gathered in the course of and as a result of the implementation of the research/study such as, but not limited to report, articles, extension research papers, data banks, multi-media presentations including policy research/study outputs, discoveries, inventions as well as income derived there from, shall be subject to government policies relating to government funded research/study, all of which are deemed incorporated into this agreement. Researchers involved in the research/study shall further be subject to such policies, rules and regulations governing copyrightable and patentable works produced by the researcher.

Section 2. Recognition of principal authors and institutions – All reports or articles including multi-media presentations using policy research/study data and output shall recognize the principal researchers and authors involved in the conduct of the policy research study.

Section 3. Joint Ownership – The researcher shall have joint ownership of the research/study with USM.

Article VI EXECUTED AS AN AGREEMENT

Section 1. Effectivity – This contract shall take effect after the same is duly signed.

IN WITNESS HEREOF, the parties hereto have caused this Contract to be executed of the dates set forth below:

| UNIVERSITY RESEARCH, DEVELOPMENT & EXTENSION COMMITTEE TEAM: | RESEARCHER (S): |
|--|-----------------|
| URDEC Chair | Researcher |
| Date | Date |
| URDEC, Vice-Chair | |
| Date | |
| RDO, Director | |
| Date | |
| Member | |
| Date | |

APPENDICES



Kabacan, Cotabato Philippines



CERTIFICATE OF NON-SIMILARITY

CERTIFICATION

| This is to | certify | that the man | uscript, | | | (Title) | | | _ has |
|------------|---------|----------------|----------|-----------|----------|----------------|-------------|----------------|-------|
| been revi | sed and | d evaluated by | the un | dersigned | l withou | t subjecting | to any par | aphrasing soft | ware. |
| Further, | the | manuscript | has | passed | the | similarity | testing. | Submitted | this |
| | (c | late) | | | with sin | milarity recei | pt hereto a | ttached. | |
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| | | | | | Ī | Department | Research | Coordinator | |
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| | | | | | | College | Research (| Coordinator | |



UNIVERSITY OF SOUTHERN MINDANAO Kabacan, Cotabato Philippines



APPLICATION FOR RESEARCH ADVISER

| | Date: |
|--|--------------------------------------|
| (Name of Proposed Adviser) | |
| Department of | |
| College of | |
| USM, Kabacan, Cotabato | |
| Sir / Madam: | |
| I would like to request that you will be my Resea SY I intend to work on | |
| | (Title) |
| · | |
| I am hoping for your most favorable approval on | this request. Thank you very much. |
| | Very truly yours, |
| Pr | rinted Name and Signature of Student |
| APPROVED | |
| | |
| | |
| Adviser | |
| Date | |

USM-EDR-F01-Rev.3.2020.02.24



UNIVERSITY OF SOUTHERN MINDANAO Kabacan, Cotabato Philippines



APPLICATION FOR CHANGE OF THESIS ADVISER

| (Name of Proposed Advi | ser) |
|--|---------------------------------------|
| Department of | |
| College of | |
| USM, Kabacan, Cotabato | |
| Sir / Madam: | |
| I would like to request for change of thesis advis | ser for the following reasons: |
| | |
| I am hoping for your favorable approval on this i | request. Thank you very much. |
| | Very truly yours, |
| | Printed Name and Signature of Student |
| RECOMMENDING APPROVAL | NOTED |
| | |
| Department Research Coordinator | Department Chairperson |
| Department Research Coordinator Date | Department Chairperson Date |
| | |
| Date | Date |

USM-EDR-F12-Rev. 3.2020.02.24



Kabacan, Cotabato Philippines



APPLICATION FOR RESEARCH TITLE

| | (Date) |
|--|--|
| | |
| Chairperson, Department of | |
| SIR/MADAM: | |
| I would like to request your office to a | allow me to research on the study entitled |
| USM-EDR-F02-Rev.3.2020.02.24 | |
| The study has the following objectives: | |
| 1. | |
| 2. | |
| 3. | |
| | Very truly yours, |
| NOT | Printed Name and Signature of Student FED |
| | |
| Adviser | Date |
| Department Research Coordinator | Date |
| | |
| College Research Coordinator | Date |
| APPR | OVED |
| | |
| Department Chairperson | Date |

USM-EDR-F02- Rev.3.2020.02.24

Appendix 5. Application for Change of Research Title



Kabacan, Cotabato Philippines



APPLICATION FOR CHANGE OF RESEARCH TITLE

| | Date: |
|---|---------------------------------------|
| | |
| Chairperson, Department of | - |
| SIR/MADAM: | |
| I would like to request your office to all | ow me to change my proposal research |
| ." | |
| The following are the reasons for the change: 1. 2. 3. | |
| V | ery truly yours, |
| | Printed Name and Signature of Student |
| NOTED | |
| Adviser | Date |
| Department Research Coordinator | Date |
| College Research Coordinator REMARKS: | Date |
| APPROVE | D |
| Department Chairperson | Date |

USM-EDR-F03-Rev.3.2020.02.24

Appendix 6. Application for Thesis Outline Defense



Kabacan, Cotabato Philippines



APPLICATION FOR THESIS OUTLINE DEFENSE

| ame | | |
|------------------------|---------------------------------|-----------------|
| Pegree/Major | | |
| hesis Title | | |
| | | |
| Date of Examination | | |
| Time | | |
| Place | | |
| MEMBER | RS OF THE EXAMINING COMMITTEE | |
| Name | Signature Dat | e |
| | | |
| | | |
| RECOMMENDING APPROVAL: | | |
| | | |
| Adviser | Co-Adviser (C | ptional) |
| | APPROVED: | |
| College Statistician | Department Resea | rch Coordinator |
| (Optional) | | |
| | Department Chairperson | |
| REPORT | ON THE RESULT OF EXAMINATION | |
| Name | Signature | Remarks |
| | | |
| | | |
| | | |
| | APPROVED: | |
| | | |
| - | Department Research Coordinator | |
| _ | | |
| | Date | |



Kabacan, Cotabato Philippines



APPLICATION FOR MANUSCRIPT DEFENSE

| Name | | | | |
|----------------------|---|-------------------------|--|--|
| Degree/Major | | | | |
| Thesis Title | | | | |
| Date of Examination | | | | |
| Time | | | | |
| Place | | | | |
| | MEMBERS OF THE EXAMINING COM | MITTEE | | |
| Name | Signature | Date | | |
| | | | | |
| | | | | |
| RECOMMENDING APPROV | AL: | | | |
| Adviser | Co-Adv | viser (Optional) | | |
| | APPROVED: | | | |
| College Statistician | Departmen | | | |
| (Optional) | Departmen | ic Research Coordinator | | |
| - | | | | |
| | Department Chairperson | | | |
| Name | RT ON THE RESULT OF EXAMINATION Signature | <u>ON</u> Remarks | | |
| Notific | Signatore | Kemans | | |
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| | APPROVED: | | | |
| | | | | |
| | Department Research Coordinator | | | |
| | Date | | | |
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Kabacan, Cotabato Philippines



OUTLINE/FINAL DEFENSE COMMENT FORM

| Name Student: | Date: | | | | |
|---------------------------------|----------------------------|-------|-----------------|--|--|
| Degree Program | Major: | | | | |
| Γitle: | | | | | |
| | | | | | |
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| Comments (use addition | nal sheets, if necessary): | | | | |
| | | | T | | |
| Chapter/Section | Comment | | Action taken | | |
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| Advisory Committee: Adviser: | | Exami | ning Committee: | | |
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| JSM-EDR-F16- Rev.0.2020.11.16 | | | | | |



Kabacan, Cotabato Philippines



FINAL DEFENSE COMMENT FORM

| Name Student: | Date: Major: | | | |
|---------------------------|-----------------------------|-------------------|--|--|
| Degree Program | Major: | | | |
| Title: | | | | |
| | | | | |
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| | _ | | | |
| Comments (use addition | onal sheets, if necessary): | | | |
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| | | | | |
| Chapter/Section | Comment | Action taken | | |
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| Advisory Committee: | | mining Committee: | | |
| Adviser: | | | | |
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Appendix 10. Application for Outline or Final Defense for Graduate Student



Republic of the Philippines UNIVERSITY OF SOUTHERN MINDANAO

Kabacan, Cotabato



OFFICE OF THE DEAN OF THE GRADUATE SCHOOL

APPLICATION FOR OUTLINE/FINAL DEFENSE

| Name: | | | Date: | |
|--|-----------|------------------------|---|----------------|
| Application for [choose one]: () Outlin | | | () Final Defense | |
| Contact number: Degree Sought: () Ed.D./Ph.D. | | nail: ijor Field: _ | | |
| () MS/MA | Min | nor Field: _ | | - |
| | d: | | Amount Paid: | <u> </u> |
| O.R. No. Date Pai Examination Date: Time: | | | Place: | |
| Thesis/Dissertation/Title: | | | | |
| Comprehensive Exam: | Ve | rified by: | | |
| | <u></u> | | GS Secretary | |
| Adviser | | | Examining Commit | tee |
| Major | _ | | P | 200 |
| Minor | -: | | 3- | |
| | | | (third member for Doctoral s | students only) |
| | | | | nadonis only) |
| RECOMMENDING APPROVAL: | | | APPROVED: | |
| GS Program Head/RC Member | Date | G | S Dean/ Chair, RC | Date |
| GS Research Coordinator/RC Member | Date | VP | Academic Affairs | Date |
| RDO Representative/GS RC Member | Date | | | |
| | | | ======================================= | |
| | SULT OF C | | INAL DEFENSE | |
| | | ricr the del | <u> </u> | |
| Type of Defense [choose only one]: () Out | line () F | inal | | |
| Adviser | Action | Exa | amining Committee | Action |
| Chairman | | | | |
| | | (third mem | ber for Doctoral students on | ilv) |
| DECOMMENDING ADDROVAL: | | (<u></u> | | |
| RECOMMENDING APPROVAL: | | | APPROVED: | 4.9 |
| Program Head Date | | | Dean | Date |
| | | VI | P Academic Affairs | Date |
| | | | | |

Appendix 11. Scoring Sheet for Graduate Student Outline Defense



Republic of the Philippines UNIVERSITY OF SOUTHERN MINDANAO Kabacan, Cotabato



Date:

OUTLINE SCORING SHEET

| Program:Title of Thesis/Dissertation: | | | |
|---|-----------|------------------------|---------------|
| Title of Thesis/Dissertation. | 3 1 3 3 3 | 3 3 2 3 3 3 | 25 - 25 - 102 |
| | Poor | Competent | Excellent |
| INDICATORS | 1 | 2 | 3 |
| 1. Reviews the literature in a way that demonstrates a | | | |
| comprehensive understanding of the research in the area of study | | | |
| 2. Identifies research questions or problems pertinent to the field of | | | |
| study, providing a focus for making significant contribution to the field | | | |
| 3. Gathers, organizes, analyzes, and reports data using a | | | |
| conceptual framework appropriate to the research | | | |
| question and the field of study | | | |
| 4. Presents appropriate analysis for expected output and relate | | | |
| findings to teaching and learning | | | |
| 5. Presents research proposal effectively in both written and oral | | | |
| forms using language appropriate to the field of study | | | |
| | | | |
| 1-5: Below standard/fails to meet standards | | Score | DESCRIPTION |
| 6-10: Meets standard 11-15: Exceeds standard | TOTAL | | |
| | Sigr | ature over printe | d name |

Appendix 12. Scoring Sheet for Graduate Student Final defense



Republic of the Philippines UNIVERSITY OF SOUTHERN MINDANAO Kabacan, Cotabato



Signature over printed name

| FINAL DEFENSE SCORING SH | EET | | |
|--|--------------------------|-------------|-------------|
| Candidate: | | | |
| Program: | | | |
| Title of Thesis/Dissertation: | - 10 - 10 - 10 - 10 - 10 | 9 R R N R N | |
| | Poor | Competent | Excellent |
| INDICATORS | 1 | 2 | 3 |
| Reviews the literature in a way that demonstrates a | | | |
| comprehensive understanding of the research in the area of study | | | |
| 2. Research questions or problems are appropriate to the field of | | | |
| study, providing a focus for making significant contribution to the field | | | |
| 3. Reports data using a conceptual framework appropriate to the | | | |
| research question and the field of study | | | |
| 4. Interprets research results in a way that adds to the understanding | | | |
| of field of the study and relates findings to teaching and learning | | | |
| 5. Communicates research output effectively in both written and | | <u> </u> | |
| oral forms using language appropriate to the field of study | | | |
| 6. Has established a productive research agenda that prepares | | | |
| student to extend his or her research beyond graduate school | | | |
| | | | l. |
| 6-10: Below standard/fails to meet standards | | Score | DESCRIPTION |
| TO SEE STATE OF THE PROPERTY O | TOTAL | | |
| 11-15: Meets standard | IOIAL | 1 | |

Appendix 13. Thesis Outline Approval Sheet for Masteral Thesis



APPROVAL OF THESIS OUTLINE

| Name: | JUAN A. DELA CRUZ | |
|-------------------|---|--|
| Degree Sought: | MASTER OF ARTS IN EDUCATION [SAMPLE ONLY] | |
| Major: | EDUCATIONAL MANAGEMENT [SAMPLE ONLY] | |
| Minor: | PUBLIC ADMINISTRATION [SAMPLE ONLY] | |
| Thesis Title: | TITLE HERE | |

ADVISORY COMMITTEE **EXAMINING COMMITTEE** ADVISER NAME HERE, PhD CHAIR NAME HERE, PhD Chair Major ADVISER NAME HERE, PhD MEMBER NAME HERE, EdD Minor Member PROGRAM HEAD NAME, PhD GS RESEARCH COORD NAME, PhD Program Head, [Program here] Research Coordinator, Graduate School Date Date GS DEAN NAME, PhD Dean, Graduate School Date Study No.: __ Recorded By: _ Recorded: RDO DIRECTOR NAME, PhD Director for Research & Development Date Index No.: _ Recorded By: _____

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APPROVAL OF DISSERTATION OUTLINE

| Name: | JUAN A. DELA CRUZ | |
|-------------------|-------------------------------------|---|
| Degree Sought: | DOCTOR OF PHILOSOPHY [SAMPLE ONLY] | 0 |
| Major: | EXTENSION EDUCATION [SAMPLE ONLY] | |
| Minor: | AGRICULTURAL SCIENCES [SAMPLE ONLY] | |
| Thesis Title: | TITLE HERE | |

ADVISORY COMMITTEE EXAMINING COMMITTEE ADVISER NAME HERE, PhD CHAIR NAME HERE, PhD Major Chair ADVISER NAME HERE, PhD MEMBER NAME HERE, EdD Minor Member MEMBER NAME HERE, PhD Member PROGRAM HEAD NAME, PhD GS RESEARCH COORD NAME, PhD Program Head, [Program here] Research Coordinator, Graduate School Date Date GS DEAN NAME, PhD Dean, Graduate School Date Study No.: _ Recorded By: Recorded: **RDO DIRECTOR NAME, PhD** Director for Research & Development Date Index No.: _ Recorded By: ____



Index No.: ____ Recorded By: _

APPROVAL OF THESIS MANUSCRIPT

| Name: | JUAN A. DELA CRUZ | | | |
|-------------------|---|---|--|--|
| Degree Sought: | MASTER OF ARTS IN EDUCATION [SAMPLE ONLY] | | | |
| Major: | EDUCATIONAL MANAGEMENT [SAMPLE ONLY] | | | |
| Minor: | PUBLIC ADMINISTRATION [SAMPLE ONLY] | | | |
| Thesis Title: | TITLE HERE | | | |
| | ADVISORY COMMITTEE | EXAMINING COMMITTEE | | |
| | ADVISER NAME HERE, PhD Major | CHAIR NAME HERE, PhD Chair | | |
| | ADVISER NAME HERE, PhD Minor | MEMBER NAME HERE, E d D Member | | |
| | GRAM HEAD NAME, PhD Fam Head, [Program here] | GS RESEARCH COORD NAME, PhD Research Coordinator, Graduate School | | |
| | GRAM HEAD NAME, PhD ram Head, [Program here] Date | GS RESEARCH COORD NAME, PhD Research Coordinator, Graduate School Date | | |
| | am Head, [Program here] | Research Coordinator, Graduate School Date | | |
| | am Head, [Program here] Date GS DEAN NA | Research Coordinator, Graduate School Date ME, PhD Ite School | | |
| | am Head, [Program here] Date GS DEAN NA Dean, Gradua Date | Research Coordinator, Graduate School Date ME, PhD Ite School | | |
| Progi | am Head, [Program here] Date GS DEAN NA Dean, Gradua Date | Research Coordinator, Graduate School Date ME, PhD Ite School | | |

Date



APPROVAL OF DISSERTATION

| Name: | JUAN A. DELA CRUZ | |
|-------------------|-------------------------------------|--|
| Degree Sought: | DOCTOR OF PHILOSOPHY [SAMPLE ONLY] | |
| Major: | EXTENSION EDUCATION [SAMPLE ONLY] | |
| Minor: | AGRICULTURAL SCIENCES [SAMPLE ONLY] | |
| Thesis Title: | TITLE HERE | |

ADVISORY COMMITTEE EXAMINING COMMITTEE ADVISER NAME HERE, PhD CHAIR NAME HERE, PhD Major Chair ADVISER NAME HERE, PhD MEMBER NAME HERE, EdD Minor Member MEMBER NAME HERE, PhD Member GS RESEARCH COORD NAME, PhD PROGRAM HEAD NAME, PhD Program Head, [Program here] Research Coordinator, Graduate School Date Date GS DEAN NAME, PhD Dean, Graduate School Date Study No.: _ Recorded By: Recorded: **RDO DIRECTOR NAME, PhD** Director for Research & Development Date Index No.: _

Recorded By: _

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Kabacan, Philippines

CAPSULE PROPOSAL FORMAT

| A. BASIC INFORMATION | | | |
|--|---|--|---------------------------------------|
| 1. Category | ☐ Program | ☐ Project | ☐ Study |
| 2. Title | | | |
| 3. Proponent/s Indicate Name Designation, Office | | | |
| 3.1. Email Address | | | |
| 3.2. Contact Number | | | |
| 4. Lead Unit/College | | | |
| 4.1. Collaborating Unit/College | | | |
| 5. Classification | | | |
| a. Research | b. D | Pevelopment | |
| ☐ Basic | | lot Testing | |
| ☐ Applied | | rototype Development ech. Promotion/ Commer | cialization |
| 6. Thematic Area | ☐ Food Security a ☐ Social Develop ☐ Good Health a ☐ Preservation of ☐ Innovations in 1 ☐ Environmental | | ns echnology ind Risk Reduction |
| 7. Sector/Commodity/Discipline | | | |

| 8. | Project Duration | |
|-----|------------------------------------|--|
| 9. | Project Location | |
| 10. | Total Budget Requested (Pl |) |
| В. | TECHNICAL DESCRIPTION | |
| 1. | Rationale / Significance | |
| | | |
| 2. | Objectives (State General C | jectives and Specific Objectives) |
| | | |
| 3. | Methodology (Brief descrip | on of how the project will be implemented). |
| | | |
| | | |
| 4. | Major Activities (Enumerat | in chronological order the tasks to be undertaken). |
| | | |
| 5. | | he specific products, processes, or services which the project is expected to nd how these can be used; quantify when possible). |
| | | |
| 6. | _ | e clienteles are and what are the expected outcomes/effects of the use of ect outputs). |
| | | |
| 7. | Potential (Briefly of | cuss the overall potential impact of the research). |
| | | |
| 8. | Estimated Budget by Sour | |

| PS | | MOOE | | TOTA | \L |
|---|------------------------|----------------------|------|-----------|---------------------|
| | | | | | |
| | | | | | |
| 9. Literature Cited | 9. Literature Cited | | | | |
| • | | | | | |
| 10. BRIEF PROFILE OF PROPOI | NENT/S (Add tal | bles if necessary) | | | |
| 1. Name: | | | | | |
| 2. Education | | | | | |
| Name & Address of Educational I | -stablishmant | Degrees Obtained & A | Area | Month / Y | 'ear |
| Name & Address of Educational E | -stablishment | of Specialization | | From | То |
| | | | | | |
| | | | | | |
| | | | | | |
| 3. Work Experience/s | | | | | |
| Position Title | C | Company | | | re Dates d/yyyy) |
| | | | | From | То |
| | | | | | |
| | | | | | |
| 4. Publications and Research Experience/s | | | | | |
| | | | | | |
| 5. Research Grants (if any) | | | | | |
| and 10 PDF Data lad Danaged Farmet | | | | | |

Appendix 18. RDE Detailed Proposal Format



Kabacan, Philippines



DETAILED PROPOSAL FORMAT

| A. BASIC INFORMATION | | | |
|--|-------------|------------------|--|
| 1. Category | ☐ Program | ☐ Project | □ Study |
| 2. Title | | | |
| 3. Proponent/s Indicate Name Academic Rank, Office | | | |
| 3.1. Email Address | | | |
| 3.2. Contact Number | | | |
| 4. Lead Agency | | | |
| 4.1. Collaborating Agency (s) | | | |
| 5. Classification | | | |
| 6. Thematic Area | | | |
| 7. Sector/Commodity/Discipline | | | |
| 8. Project Duration | Start Date: | | Completion Date: |
| 9. Project Location / Research Station | | | |
| 10. Total Budget Requested (Php) | | | Fund Source: |
| | | | |
| B. TECHNICAL DESCRIPTION | | | |
| Rationale and Background ne | | urrent solutions | oject/study, current problems, gaps and s to the problem and alternatives. State blems). |

| 2. | 2. Objectives (State the General Objectives and Specific Objectives) | | |
|----|--|--|--|
| | | | |
| | | | |
| 3. | Review of Literature | (Related research/activities that have been conducted). | |
| | | | |
| 4. | Conceptual Framework | (Present in graphical presentation the current problems and how these will be resolved through the research. Show the deliverables of the project that would solve the problem and what are the directions or sustainability of the results of the project). | |
| | | | |
| 5. | Methodology | (Brief description of how the project will be implemented to attain the objectives). | |
| | | | |
| 6. | Work Plan Schedule | Please attach Work Plan Schedule Form. | |
| | | | |
| 7. | Expected Outputs | (Indicate the specific products, processes, or services which the project is expected to produce and how these can be used; quantify when possible). | |
| | | | |
| 8. | Target Beneficiaries | (Who are the clienteles and what are the expected outcomes/effects of the use of the project outputs). | |
| | | | |
| 9. | Potential Impact | (Briefly discuss the overall potential impact of the research). | |
| | | | |

| 10. Budget | Please attach Budget Summary Form. | |
|-----------------------------------|------------------------------------|--|
| | | |
| 11. References | | |
| | | |
| 12. Capsule Curriculum Vitae (CV) | | |

Attachments:

- 1. Work Plan Schedule
- 2. Budget Summary
- 3. Worksheet Details for MOOE

USM RDE Manual 2023



Kabacan, Philippines

WORK PLAN SCHEDULE

| TITLE: | | | | | | |
|----------------------------|------------------|---------------|-------------------------|-------------------------|-------------------------|-------------------------|
| COLLEGE/DEPARTMENT/ | UNIT | | | | | |
| PROPONENT(S): | | | | | | |
| Total Duration (in months) | | Planned Start | | | Planned End | |
| | | | | Sche | edule of Activities | |
| Objectives | Expected Outputs | Activities | | | Year 1 | |
| | | | 1 st Quarter | 2 nd Quarter | 3 rd Quarter | 4 th Quarter |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

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Republic of the Philippines UNIVERSITY OF SOUTHERN MINDANAO

Kabacan, Cotabato

Institutional Animal Care and Use Committee (IACUC) Form 1

| | ANIMAL CARE and USE STATEMENT | |
|------|--|--|
| | (Protocol Review Form) | IACUC Use Only |
| l. | PROCEDURE(S) and/or TITLE OF RESEARCH STUDY: | Protocol #: |
| | | Review Date: |
| II. | GENERAL PURPOSE/OBJECTIVES: | Action: / / Approved / / Approved / / Approved |
| III. | DURATION or TIME FRAME: | / / Approved |
| | DOINTHON OF TIME TRAINE. | |
| IV. | RESPONSIBLE PERSON/S: | |
| | 1. Name/s (underline the leader): | |
| | 1. Contact number/Email: | |
| | 2. Qualifications (Provide the degree/s and/or training experience; write course): | for undergraduates, |

3. Affiliation/Address:

4. Research Adviser:

V. BACKGROUND and SIGNIFICANCE OF THE PROCEDURE or RESEARCH:

(Include a description of biomedical characteristics of the animals which are essential to the proposed procedure/research and indicate evidence of experiences with the proposed animal model)

VI. DESCRIPTION of METHODOLOGIES/EXPERIMENTAL DESIGN:

This section should establish that the proposed procedures/research is well designed scientifically and ethically. The following should be indicated or described:

- A. Type of animal to be used (species and strain/breed):
- **B. Source of animals** (complete name and address of source/facility):
- **C.** Reason/basis for selecting the animal species (give the reason/s for the use of the animals):
- **D. Sex, age, and number of animals** (justify the number of animals that will be used):
- E. Quarantine and acclimation or conditioning process (cite reference):

F. Animal care procedures

- i. Cage type (give the type, material, and dimensions of the cage that will house the animals):
- ii. Number of animals per sex per cage:
- iii. Identification (indicate how each individual animal will be identified from one another):
- iv. Cage cleaning method:
- v. Living conditions (include where the animals will be housed, the room temperature, humidity, ventilation, and lighting):
- vi. Animal diet, feeding, and watering methods:

G. Experimental or animal manipulation method:

- i. Description of animal or treatment groups (give a description of the methods of animal manipulation that will be used including the method of conditioning):
- ii. Restraint or handling of animals per technical procedure/s to be conducted:
- iii. Dosing method(s) to be performed in animals (include the frequency, volume of experimental dose(s), route, method of restraint and expected outcome or effects):
- iv. Biological sample collection (specify the type of biological agent, whether blood, urine, feces, etc., and identify its collection method/route, frequency, volume, and method of restraint used):
- v. Animal examination procedures and frequency of examinations (including restraining methods):

- vi. Anesthesia of animals (including drug, dosage, and frequency):
- vii. Pre-emptive medications that will be given to animals prior to surgery or technical procedure/s to be performed in animals:
- viii. Surgical procedures, type, and purpose (*if αny*):
 - 1. Where will surgery be performed?
 - 2. Description of supportive care and monitoring procedures during and after surgery:
 - 3. Description measures for possible post-surgical complications:
 - 4. Name(s) of surgeon(s) and qualifications.
- ix. Humane endpoints (Describe the plan for monitoring pain, discomfort, or distress during and after the procedure. If animals will be euthanized, include the method that will be used).
- **B.** Potential hazards (Include any potential hazards for the animals and the personnel involved as well as preventive measures to avoid hazards.)
- C. Indicate and describe euthanasia method (if any):
- D. Organ sample collection after euthanasia:
- E. Is there a non-animal model applicable for the procedure/study? If so, please provide the reason for not using it:
- F. Indicate the name(s) and qualification(s) of all personnel who will be responsible for conducting the procedures (An additional list can be attached; indicate if student).
- **G.** Waste disposal (Describe how animal carcasses and other wastes generated by the procedure will be disposed of.)
- H. List of References (please attach list):
- II. DECLARATION BY THE RESPONSIBLE PERSON:

I ACCEPT THE RESPONSIBILITIES FOR ASSURING THAT THE PROCEDURES/STUDY WILL BE CONDUCTED IN ACCORDANCE WITH THE APPROVED PROTOCOL.

I ASSURE THAT ALL PERSONNEL WHO WILL USE THIS PROTOCOL AND WORK WITH ANIMALS HAS RECEIVED APPROPRIATE TRAINING/INSTRUCTIONS IN PROCEDURAL AND HANDLING TECHNIQUES, AND ON ANIMAL WELFARE CONSIDERATIONS.

I AGREE TO OBTAIN WRITTEN APPROVAL FROM THE INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC) PRIOR TO MAKING ANY CHANGES AFFECTING MY PROTOCOL.

I ALSO AGREE TO PROMPTLY NOTIFY THE IACUC IN WRITING OF ANY EMERGENT PROBLEMS THAT MAY ARISE IN THE COURSE OF THIS STUDY, INCLUDING THE OCCURRENCE OF ADVERSE SIDE EFFECTS.

| Principal Investigator (Signature over Printed Name) | Date Accomplished |
|--|-------------------|
| Research Adviser (Signature over Printed Name) | Date Accomplished |
| Noted by: | |
| Chair, USM IACUC | Date: |

<<PROJECT (or STUDY) TITLE >>

<< PROJECT (or STUDY) LEADER>
Project Team Leader

<<STUDY (or COMPONENT) LEADER>

Funded by:

USM RESEARCH FUND

___ Quarter NARRATIVE REPORT <<DATE>>

UNIVERSITY OF SOUTHERN MINDANAO Kabacan, Cotabato







Kabacan, Philippines

NARRATIVE REPORT

| A. BASIC INFORMATION | | | |
|---|---|---|--|
| 1. Title | | | |
| 2. Project Leader Study Leader (Indicate College/Unit) | | | |
| Email Address | | | |
| Contact Number | | | |
| 3. Lead Unit/College | | | |
| Collaborating Unit/College | | | |
| 4. Category | ☐ Program | ☐ Project ☐ Study | |
| 5. Classification | ☐ Research | ☐ Development | |
| | □ Basic | ☐ Pilot Testing ☐ Prototype Development ☐ Tech. Promotion/Commercialization | |
| 6. Thematic Area | □ Quality Learning Skills Development and Literacy □ Food Security and Poverty Reduction □ Social Development, and Strong Institutions □ Good Health and Well-being □ Preservation of Culture □ Innovations in Science, Engineering, and Technology □ Environmental Protection, Conservation, and Risk Reduction □ Sustainable Entrepreneurship and Management | | |
| 7. Sector/Commodity/Discipline | | | |
| 8. Project Duration | | | |

| 9. Project Location | |
|---------------------------------|--|
| 10. Total Approved Budget (Php) | |

| USI | M-RE | S-F27-Rev.0.2021.12.01 |
|-----|------|--|
| В. | TE | CHNICAL DESCRIPTION |
| 1. | R | ationale / Significance |
| | | ntionale gnificance |
| | Ol | ojectives (State the General Objectives and Specific Objectives) |
| | 2. | Methodology Statement of the procedure for this quarter; based on what you had conducted. Indicate the method of each study of the project or each component of the study. |
| | 3. | Accomplishment |
| | | Indicate the accomplishment of each study of the project or each component of the study. |
| | | You can combine results and discussion or separate results from discussion. Include data in tables and/or figures. |
| | 4. | Percent Budget Utilized |
| | 5. | Attachments: |
| | | a. Data, supplementary table and/or figures, photo documentation (when applicable)b. Workplan |

Appendix 22. Quarterly Report and Monitoring Form

| | | S SOUTHE SE THE SECOND | UNIVERSITY OF SO | OUTHERN MINDA , Philippines | NAO | | | |
|----|---------------|---|----------------------|--------------------------------|---------------|-----------|------------------------|------------------|
| | | | QUARTERLY MONITORING | AND EVALU | JATION REPORT | | | |
| ŧ. | | | | | | | | |
| | Title: | | | Period Covered: | | URDEC No: | | |
| | Proponent(s): | | | Agency/Fund Source: | | | ☐ Program ☐ Project | □ Study □ Others |

| FIRST QUARTER | | | | | | | | |
|--|------------|---|--|---|-------------------------------------|--------------|----------------------------|-------------------------|
| Objectives Based in Work Plan Schedule | Activities | Outputs (Brief description of measurable outputs, detailed narrative report for attachment) | Accomplishment Percentage for the Quarter (%) | Accumulated Percentage for the whole project duration (%) | Problems Encountered (if any) | Action Taken | Fund Utilization (%) | Remarks by Evaluator |
| 1. | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| 2. | | | | | | | | |
| | | | | | | | | |
| 3- | | | | | | | | |
| | | | | | | | | |
| i e | I | l | I | I | | I | 1 | |

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Kabacan, Cotabato

Funded by:

USM Grant

TERMINAL REPORT << DATE>>

<<PROJECT TITLE>>

Project Team Leader << PROJECT LEADER>>





Kabacan, Philippines

TERMINAL REPORT

| A. BASIC INFORMATION | | |
|---|---|--|
| 1. Title | | |
| Project Leader Study Leader (Indicate Name, Office) | | |
| Email Address | | |
| Contact Number | | |
| 3. Lead Unit/College | | |
| Collaborating Unit/College | | |
| 4. Category | ☐ Program | ☐ Project ☐ Study |
| 5. Classification | Research | ☐ Development |
| | □ Basic | ☐ Pilot Testing ☐ Prototype Development ☐ Tech. Promotion/Commercialization |
| 6. Thematic Area | ☐ Quality Learning Skills Development, and Stills Development, and Stills Good Health and Well-being ☐ Preservation of Culture ☐ Innovations in Science, Engil ☐ Environmental Protection, Good Gustainable Entrepreneurs | Reduction trong Institutions g ineering, and Technology Conservation, and Risk Reduction |
| 7. Sector/Commodity/Discipline | | |
| 8. Project Duration | | |
| g. Project Location | | |

| USM-RES-F ₂ 8-Rev. _{0.2021.12.01} |
|---|
| B. TECHNICAL DESCRIPTION |
| 1. Rationale / Significance |
| Rationale Significance |
| Objectives (State the General Objectives and Specific Objectives) |
| |
| |
| |
| 2. Review of Related Literature |
| |
| |
| 3. Methodology (Description of how the project was conducted). |
| |
| 4. Results and Discussion |

10. Total Budget Requested (Php)

figures.

Conclusion

6. **Recommendation** (if any)

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You can combine results and discussion or separate results from discussion. Include data in tables and/or

7. References

8. **Attachment**s:

- a. Data, supplementary table and/or figuresb. Workplan
- c. Publishable paper

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Title Here

Author one¹, Author 2², ...

¹Affiliation 1 (give the Department/Unit, University, Province, Country)

²Affiliation 2 (give the Department/Unit, University, Province, Country) (and so on)

Corresponding author:

Corresponding author name, Department/Unit, University, Province, Country E-mail: [email here], Phone number: [Phone here]

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Abstract

Type your abstract here (150-250 words). In one paragraph, please include the problem/research gap, questions/objectives, general methodology, highlights of results, conclusion, and implication.

Keyword [Supply 5-8 keywords that readers can use to search your article, alphabetical order]

(next page)

Introduction

Methodology

Sub-heading 1

Sub-heading 2

Results

Discussion

Literature Cited

(Tables and Figures in separate pages)

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Appendix 25. Application Form for Intent to Publish



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

INTENT TO PUBLISH FORM

| Date: | |
|--|--|
| Applicant's Name: | |
| Fund source: | |
| URDEC Research permission to | |
| proceed #: | |
| Author/s: | |
| Author's ORCID #: | |
| Corresponding Authors: | |
| Collaborating institution/s: | |
| Working title: | |
| Abstract: | |
| | |
| | |
| | |
| | |
| | |
| Journal name: | |
| Editors: | |
| Impact factor: ISI Journal Citation Reports © | |
| Ranking 2020: | |
| Online ISSN: | |
| Attachment: draft of the paper | |
| | |

^{*}The applicant will submit this form to the URDEC through the Publication Services Office.