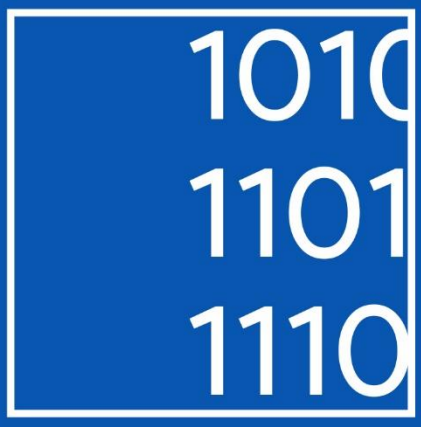
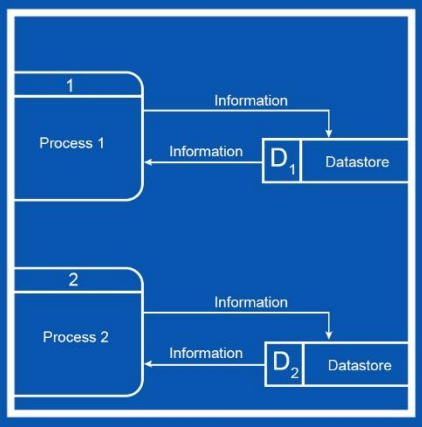
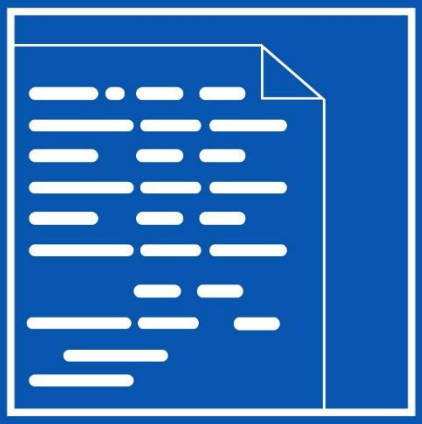
Research Manual

Bachelor of Science in Information Technology Program







Guide for Successful Capstone

College of Science and Technology
www.cst.gsc.edu.ph

Brief History

The Guimaras State College has its humble beginning in 1964 as a secondary vocational institution (Buenavista Vocational School) by virtue of Republic Act 3933.

The Act, with Representative Rodolfo Ganzon (2nd District of Iloilo) as its principal author, was the culmination of the long efforts of the local officials especially Hon. Tomas Junco was sponsored a resolution approved by the municipal council members in 1962 requesting the statesmen in Congress to establish a vocational school for the youngsters in Buenavista. In addition, Congressman FerminCaram of the Lone District of Iloilo City exerted effort for the implementation of the law.

Due to lack of funding, the school was not opened immediately. Four years after, through the efforts of Atty. Ernesto Gaduyon and the former Governor Abelardo Javellana, a God-fearing and kind-hearted Atty. Juan Salvador was persuaded to donate his Fifty Thousand(50, 000) square meter lot from his estate in Barangay Mclain, Buenavista, Guimaras to be the school site. The school opened with the very few students in the first and second year high school having (1) school head, two(2) academic teachers and five (5) non-teaching personnel.

During the first six years of its operation, the school was under the supervision of the Superintendent of Iloilo School of Arts and Trades. Later, the Regional Director of DECS, Region VI-Western Visayas designated a Vocational School Administrator to run the school.

In 1980, the school was granted a permit to offer Post-Secondary Courses. The Two Year Trade Technical and Technology Courses paved the way to higher education, which are considered terminal and some ladderized courses. Among these courses offered are Foods, Garments, Automotive, Building Construction, Furniture and Cabinet Making and Agriculture. More courses were opened later due to the demand of the people. To mention: Electricity, Electronics and Cosmetology were added to the old curriculum.

In 1990, the school passed the assessment conducted by the Bureau of Technical and Vocational Education, Region VI giving her a grade of 1.8. This assessment aimed to check whether school should continue to offer Post-Secondary courses or not. And so the bureau of Tech-Voc. Ed. recognizing the school to be growing progressively, advised the Vocational Administrator to offer Technology Courses, which are terminal in nature.

In 1992, the Sangguniang Bayan of Buenavista passed a resolution requesting the Congressional Representative to file a bill in Philippine Congress for the conversion of Buenavista Vocational School (BVS) in Guimaras Polytechnic College. During this period, the school conducted surveys whether courses in the tertiary will be welcomed by the graduates and their parents.

In July1994, Representative Alberto Lopez filed House Bill 6252 in Congress seeking the convention of the BVS into Polytechnic College. In March 1995, President Fidel V. Ramos signed into law Republic Act 7944, paving the way paving the way for the conversion of Buenavista Vocational School into a Polytechnic Tertiary School under the name, Guimaras Polytechnic College. The conversion was widely disseminated to all barangays and towns of the province.

The Governor, Emily R. Lopez herself announced the conversion to all people anywhere she goes that it reached not only in the whole of Region VI but also in foreign countries.

In June 2000, a consultation and public hearing on House Bill nos. sponsored by Representative Emily R. Lopez of the Lone District of Guimaras was conducted in GPC Function Room. It was attended by 179 registered participants from the public and private sectors. All sectoral representatives expressed full support for the conversion of GPC, Buenavista and WVCST-Mosqueda Campus, Jordan into a State College. Then, in the eleventh congress first regular session, Hon. Dante V. Liban and Hon. Emily R. Lopez filed House Bill 12358 (in substitution of House Bill 5807 & 7382). A year after, (June 8, 2001), the long cherished dream of GPS community has become a reality when Republic Act 9138, an act establishing the Guimaras State College, integrating therewith the Guimaras Polytechnic College in the Municipality of Buenavista, and the Western Visayas College of Science and Technology – Guimaras Extension in the Municipality of Jordan was signed into law by President Gloria Macapagal Arroyo. At last, the opportunity has come to the Guimarasnons to attain a course, to be educated, and to be ready in the field of work with lesser expenses sacrificing quality education.

As per BOT Resolution #13-2005, the GSC Board of Trustees approved the proposal to offer Bachelor of Science in Information Technology starting Academic Year 2005-2006.

Today, Guimaras State College continues to deliver the services expected to her and would continue to strive to develop curriculum that is fitted to the needs of the people in the surrounding communities for them to be competitive nationally and globally.

VISION OF THE INSTITUTION

Center of Excellence in Education and Green Technology Generation.

MISSION OF THE INSTITUTION

Guimaras State College shall produce quality graduates and professionals responsive to the needs of the community through competent faculty and staff and updated facilities.

GOALS OF THE ACADEMIC UNIT

A. Provide quality and excellent education and training for the higher manpower skills of technologist, technicians and professionals;
B. Strengthen community involvement for technological and industrial development of the nation;
C. Undertake relevant technological researches and innovations that promote the use of renewable resources and the conservation of energy and natural resources;
D. Promote production of high quality goods and efficient services through green technology for socio-economic development.

OBJECTIVES OF THE PROGRAM

A. Produce globally competitive, innovative, God fearing, morally upright and productive information technology professionals;
B. Transfer ICT knowledge and skills for better quality of life of the community;
C. Develop research capabilities for information and technological innovations;
D. Engage in revenue generating ICT jobs and other environment-friendly computing services.

COURSE DESCRIPTION

This is a very special course in the BSIT program. Students do it in the final year of studies and it is their opportunity to demonstrate that they can indeed meet the levels of performance expected of an IT professional. The Capstone Project includes project proposal, feasibility studies, intellectual property, teamwork, budget, schedule, management, professional communications (i.e. reports, presentations), planning, design, implementation, deployment, and testing. Students will be expected to do much more than “get something working”. They will be expected to meet a number of strictly enforced milestones and to take considerable initiative in realizing specific goals. Moreover, the Capstone Project is a way of determining whether students are ready to graduate.

CAPSTONE PROJECT EDUCATIONAL OBJECTIVES

The Capstone Project has a number of educational objectives. Although each Research / Capstone Project is different and the relative emphasis will vary, the subject will involve students in:

- Bringing together and integrating knowledge and skills in the course as a whole;
- Reinforcing and developing competencies that have not been sufficiently emphasized in the fundamental subjects;
- Defining a substantial engineering study or design task and carrying it to completion within a specified time and to a professional standard;
- Completing a comprehensive written and bound report that places the Research / Capstone Project in context, defines its objectives, and describes the work done with the resulting conclusions or recommendations;
- Bridging the gap between the undergraduate studies and the professional future, and demonstrating professional competencies and capabilities;
- Demonstrating initiative and creativity, taking pride in the achievement of a difficult task.

Through this course, students are prepared in their respective careers. The bulk of the work (i.e., the Research / Capstone Project work itself) is to be done outside of the classroom.

RESEARCH / CAPSTONE PROJECT AGENDA

The Research / Capstone Project agenda/thrust of the college are the following, but not limited to:

1. Food Security
2. Organic Agriculture
3. Renewable Energy
4. Peace and Order and Security
5. Human Resource Development
6. Agri-Eco Tourism
7. Biodiversity, environmental studies and climate change mitigation
8. Religion, Culture, Arts and History
9. Policy and Governance

THE ACM FORMAT

This format may be used especially if the research / Research / Capstone Project being proposed are not about Software Development to be coordinated with the Adviser / Dean. (Please refer to Appendix M. ACM Format)

SUGGESTED AREAS OF RESEARCH / CAPSTONE PROJECT

Research / Capstone Project Categories

The Research / Capstone Project must be useful to any establishment of the same nature or scope. It must not exist or have been proposed by previous Proponents/Researchers. The Research / Capstone Project must not be developed using the off-the-shelf application programs. The proposed computerized system may fall in any of the following categories, but not limited to:

Software Development

- Software Customization (most especially FOSS – *Free Open Source Software*)
    - Extensions
    - Plug-ins
- Expert Systems and Decision Support Systems / Intelligent Systems
- Systems Software (e.g. Utilities, Interpreters, Simulators, Compilers, Security-related Software)
- IS Development (with at least Alpha Testing with Live Servers
- Web Applications Development
- Mobile Computing Systems

Multimedia Systems

- Game Development
- E-learning Systems
- Interactive Systems
- Information Kiosks

IT Management

- IT Strategic Plan for sufficiency complex enterprises
- IT Security Analysis, Planning and Implementation

PRE-REQUISITES

The student must finish the following courses that prepare him/her to undergo a formal capstone project/research study:

- **Basic IT 204** Technical Writing and Presentation Skills in IT
  *Pre-Requisite: Basic IT 204-Technical Writing and Presentation Skills in IT
- **Basic IT 301**-Intro to IT Research/ Capstone 1

RESEARCH / CAPSTONE PROJECT TEAM

The Capstone Project team is composed of at most five (**5**) members. The following are the roles that the proponents/researchers should play:

Project Manager (PM) - The person with authority to manage a Research / Capstone Project. This includes leading the planning and the development of all Research / Capstone Project deliverables. The project manager is responsible for the budget, work plan and all Project Management Procedures (scope management, issues management, risk management, etc.). He is responsible for the success of the entire activity.

Systems Analyst / Database Designer (SA/DD) – the person who checks that all parts of the system are coordinated. The person who makes sure that the database design is complete and robust. He coordinates well with the PM.

Network Designer / UI Designer (ND/UID) – The person who masters the system's network design and prepares the User-Interface design (Forms/ Screen Shots/ Storyboard). He coordinates well with the SA/DD.

Software Engineer / Programmer (SE/P) - The person who design, write, and test computer programs. He coordinates well with the ND/UID. May be 2 in a group of 6 members.

QA Tester/ Technical Writer (QA/TW) - A person who ensures the quality of the software product and help find and eliminate any bugs. He determines the functionality of every aspect of a particular application. A person who finalizes the Research / Capstone Project study document, both the system and the Research / Capstone Project manuscript. He coordinates well with the SE/P.

DUTIES AND RESPONSIBILITIES OF THE PROPONENTS/RESEARCHERS

1. Keep informed of the Capstone Project Guidelines and Policies.
2. Keep informed of the schedule of Research / Capstone Project activities, required deliverables and deadlines posted by Adviser and Dean.
3. Submit on time all deliverables specified in this document as well as those to be specified by the Adviser and Dean.
4. Submit on time all requirements identified by the Capstone Project Oral Defense Panel during the Oral Defense.
5. Submit on time the requirements identified by the adviser throughout the duration of the Capstone Project.
6. Schedule regular meetings (at least once a month) with the Adviser throughout the duration of the Capstone Project. The meetings serve as a venue for the proponent to report the progress of their work, as well as raise any issues or concerns.
7. Schedule regular meetings (at least once in a semester) with the Dean throughout the duration of the Capstone Project.

POLICY ON REGROUPING

Regrouping is allowed if less than 3 members of the group remain from Basic IT 301-Intro to IT Research/ Capstone 1 to Major IT 403-Capstone Project 2/ Thesis. Should this happen, the group may be disbanded and members of these affected groups may join in other groups for as long as the maximum number for each group is followed. However, if the remaining member(s) decide(s) to continue with his/their Research / Capstone Project, regrouping may not apply but with consent of the Adviser and the Dean. Revision of the scope may then be an option. The title/topic to be pursued will then be decided among the team members and the Dean.

RESEARCH / CAPSTONE PROJECT ADVISER

The subject teacher is by default the adviser of all groups assigned to him or her.

Duties and Responsibilities as the Subject Teacher

1. Announce Research / Capstone Project areas (at the start of the each semester) to the students;
2. Conduct general meetings with the students to discuss the Capstone Project Guidelines, Policies and Deliverables, and to allow the students to raise and clarify issues;
3. Select a Proposal Hearing and Oral Defense panel for each team;

4. Schedule Research / Capstone Project activities, such as the deadlines of deliverables and Proposal Hearing and Oral Defense sessions.
5. Post schedules, Proposal Hearing and Oral Defense guidelines, requirements guidelines, and other announcements;
6. Furnish every member of the Proposal Hearing and Oral Defense panel with all the necessary Capstone Project documents before the Proposal Hearing or Oral Defense;
7. File at least one copy of the Proposal Hearing and Oral Defense panel's evaluation (including revisions) and the Revised and Approved Deliverables at every stage of the Research / Capstone Project.
8. Submit collated grades of students under his/her section for that term.

Duties and Responsibilities as the Adviser

1. Ensures that the study proposed by the students conforms to the standard of the College and has immediate or potential impact on the research thrust of the college.
2. Guides the Research / Capstone Project students in the following tasks while in the proposal stage:
    a. Defining the research problems/objectives in clear specific terms
    b. Building a working bibliography for the research
    c. Identifying variables and formulating hypothesis, if any determining research design, population to be studied, research environment, instruments to be used and the data collection procedures
3. Meets the team regularly (at least twice a month, NOTE: the team must seek proper appointment) to answer questions and help resolve impasses and conflicts.
4. Points out errors in the development work, in the analysis, or in the documentation. The adviser must remind the Proponents/Researchers to do their work properly.
5. Reviews thoroughly all deliverables at every stage of the Research / Capstone Project, to ensure that they meet the department's standards. The adviser may also require his/her Proponents/Researchers to submit progress reports regularly.
6. Recommends the Proponents/Researchers for Proposal Hearing and Oral Defense. The adviser should not sign the Proposal Hearing Notice and the Oral Defense Notice if he/she believes that the Proponents/Researchers are not yet ready for Proposal Hearing and Oral Defense, respectively. Thus, if the Proponents/Researchers fail in the Proposal Hearing or Oral Defense, it is partially the adviser's fault.
7. Clarifies points during the Proposal Hearing and Oral Defense.

8. Ensures that all required revisions are incorporated into the appropriate documents and/or software.
9. Keeps informed of the schedule of Research / Capstone Project activities, required deliverables and deadlines.
10. Recommends to the Proposal Hearing and Oral Defense panel the nomination of his/her Research / Capstone Project for an award.
11. As a special adviser, he/she is responsible to be:
    a. A provider
    b. An encourager
    c. A dictator
    d. A pushy boss
    e. A connector
    f. An employment agency

PANEL COMPOSITION

The panel is composed of 1 Chairman, 3 members, and may include content experts and recorder as assigned if necessary. Their duties and responsibilities include the following, but not limited to:

Duties and Responsibilities of the Panel

Chairman

1. Brief the Proponents/Researchers about the Proposal Hearing or Oral Defense program during the actual Proposal Hearing or Oral Defense, respectively.

2. Issue the verdict. The verdict is a unanimous decision among the three members of the Capstone Project Proposal Hearing or Oral Defense panel. Once issued, it is final and irrevocable.

3. Nominate a Research / Capstone Project for the Outstanding Research / Capstone Project Award. Guidelines for the Outstanding Research / Capstone Project Award will be provided separately.

Panel Members / Content Expert

1. Validate the endorsement of the adviser. The panel serves as "Internal Auditors", putting some form of check and control on the kinds of Researches / Capstone Projects being approved by the College.
2. Evaluate the deliverables.
3. Recommend a verdict.

4. Listen and consider the request of the adviser and/or the Proponents/Researchers.
5. Nominate a Research / Capstone Project for the Outstanding Research / Capstone Project Award. Guidelines for the Outstanding Research / Capstone Project Award will be provided separately.

RESEARCH / CAPSTONE PROJECT DURATION

The BSIT Capstone Project shall be completed within two semesters (IT Basic IT 301-Intro to IT Research/Capstone 1 and Major IT 403-Capstone Project 2/Thesis) with the following phases:

Pre-proposal Stage

- Course Enrolment
- Capstone Project Orientation
- Short Listing of Possible Research / Capstone Projects
- Title Critiquing and **Patentability Check (Patent Searching) – via ITSO**
- Pre-Proposal Statement Preparation
- Pre-Proposal Hearing

Proposal Stage

- Practical Examination of the chosen Programming Language (by team) - optional
- Writing of Chapters I, II, III, and IV (planning and design only)
- Proposal Manuscript Submission
- Proposal Hearing
- Proposal Manuscript Revisions

Oral Defense Stage

- Analysis
- Design
- Development
- Testing
- Prototype Submission (3 Loops) 1st loop- 30 50, 2nd loop- 51 to 70, 3rd loop- 71 to 99%
- Oral Defense Manuscript Submission (3 Loops)
- Oral Defense Proper
- Oral Defense Manuscript Revisions

Patent Process (via ITSO – optional)

- Patent Drafting
- Patent Application (if possible)
- Technology Transfer

Public Presentation

(As recommended by the Philippine Society of IT Educators (PSITE) – Research Committee)

- Public Presentation
- Public presentation is required. It should be a school-based presentation open for public which may include the Poster category
- Other Options
  - Regional Student Congress Presentations to Philippine Computing Science Congress of CSP, National Conference on IT Education of PSITE

GRADING SYSTEM

Proposal Stage (Basic IT 301-Intro to IT Research/ Capstone 1-Prelim and Midterm)

The Final Grade of each proponent will comprise of the following:

Average grade of the Panel Members including the Chairman	60%
Adviser of the Research / Capstone Project / Group	30%
Co-Researcher (Peer Grading)	10%
TOTAL	100%

Capstone Project Proposal Manuscript (group/team grade) 40%	
Initial Pages • Table of contents is consistent • Acknowledgement is brief and formal • Abstract is brief but complete	2
Chapter 1 • Introduction is intact and provides clear overview of the entire Research / Capstone Project • Statement of the Problem/ Objects is SMART • Scope and Limitation of the Research / Capstone Project are clearly defined	10

Chapter 2 • Related literatures are recent and relevant • Anchor provides solid background of the Research / Capstone Project • Auxiliary theories are evident • Sources are appropriately cited and noted • Related studies are relevant and includes global and local scope	5
Chapter 3 • There should be comprehensive discussions on the technologies (hardware/software) involved in the Research / Capstone Project and its related Research / Capstone Projects in the past	5
Chapter 4 • Methodology strictly follows the SDLC (esp. for Software Development) • Methodology includes project management techniques appropriate for the chosen Research / Capstone Project. • Requirements Specification is more or less complete and answers the objectives • Design Tools used are relevant and appropriate which should be based on requirements • Development Plan is concrete and should be consistent with the Design • Testing techniques to be used should assess all aspects of the developed Research / Capstone Project • Implementation Plan should be aligned with the objectives	10
Final Pages • Findings and Conclusions are attuned with the objectives • Recommendations are feasible and practical • Terms in the glossary are defined operationally • Bibliography should be in MLA Format • Appendices are relevant and help support the principal content • Glossary should be arranged alphabetically and defined operationally	3
Manuscript Mechanics • Organization and Fluidity of ideas are apparent • Formatting and layout are consistent • All parts of the manuscript should be grammatically correct	5

Oral Examination (Individual grade) 20%	
Comprehensiveness of the Answer/Ideas	10
Contribution/Support to the Team	7
Delivery / Command of the English Language	3

The rating/evaluation of the subject/adviser for each of the Proponents/Researchers shall be based on the following:

Subject/Adviser's Grade 30%	
Deliverables	20
Attendance	5
Journal Entries / Attitude / Behavior	5

Verdicts

There will be three (3) possible verdicts after the Proposal Hearing. The verdict is a unanimous decision among the three members of the Capstone Project Oral Defense panel. Once issued, it is final and irrevocable.

APPROVED. Minor revisions are necessary but they do not have to be presented in front of and checked by all panelists. 35 – 40 (based on proposal manuscript score)
APPROVED WITH REVISIONS. Major revisions shall be incorporated in the final copy of the revised Project Proposal summary. These must be checked by the panelists.24 – 34
DISAPPROVED. The Proponents/Researchers failed to propose a researchable or scholarly Research / Capstone Project. Below 24

System Oral Defense (Prefinal to Final of Basic IT 301, Midterm and Final of MIT 403)

Capstone Project Output (Group Grade)	60%
Oral Examination (Individual Grade) same rubric with	20%
Skills Test	20%
TOTAL	**100%**

Capstone Project Output (Group Grade) 60%	
The output should be consistent with the objectives as defined during the proposal stage	25
All major modules and features of the system's output as defined after the proposal stage are delivered. The credit shall be based on the percentage of delivered items.	25
Group Debugging • The team shall display competence in resolving planted bugs.	10

Verdicts

ACCEPTED WITH REVISIONS. Revisions are necessary but they do not have to be presented in front and checked by all panelists. 56 to 80 (based on lowest score in the group and excluding Skills Test score)
REORAL DEFENSE. Another Oral Defense session, in which all panelists must be present, is necessary to further clarify the objectives and scope of the capstone project. Student must re-apply for another Hearing Notice Form from the Center for Research if the Oral Defense is scheduled after the semester ends.52 to 55 and upon the panel's unanimous decision
NOT ACCEPTED. The proponent failed to achieve the objectives of the research established in the proposal. The panelists' numeric grades are not anymore needed. Below 52

GUIDELINES

Basic IT 301-Intro to IT Research/ Capstone 1

1. The students shall form a team of 4 or 5 members. They then decide who plays the pertinent roles. The team then submits **Project Team Assignments Form** (*Deliverable D1- Please refer to* Appendix A. Project Team Assignments Form*)* with signatures, to the Subject Teachers or the Dean's Office.

2. The Proponents/Researchers of the Research / Capstone Project shall prepare 10 different possible topics/titles, and present/consult these topics to any of the CICS teachers or any expert of the field. The Team shall ensure the novelty or patentability of the Research / Capstone Project through the help of the UC-ITSO facility or using patent libraries online. The project manager would then select 3 - 5 out of the 10 possible titles.

3. The Proponents/Researchers shall make the **Pre-Proposal Statements** (*Deliverable D2- Please refer to* Appendix B. Pre-Proposal Statement Template) of each of the selected topics/titles.

4. The Pre-Proposal Hearing will be scheduled upon the completion of the Pre-Proposal Statements. During this hearing, the team members, subject teachers and the Dean shall convene and select only one of the 3 - 5 topics/titles presented. Only the approved Research/ Capstone Project topics should proceed to the research proposal stage. After a topic/title is finally chosen, the team then accomplishes (in triplicate) a **Project Working Title Form** (*Deliverable D3 - refer to Appendix* C. Project Working Title Form) which will then

indicate the name of the appropriate adviser as decided by the team of advisers together with the proponents.

5. The team shall prepare all the parts of the proposal manuscript on time with the set/agreed dates. The team always seeks approval from the adviser all the required deliverables, by letting him sign/conform with the submitted documents. By conforming, it means that the deliverable had been checked /corrected diligently.

    a. Please refer to following document formatting standards:
        i. Paper
            1. Size: 8.5 x 11
            2. Orientation: Portrait (except for special diagrams)
            3. Substance: 20 (for copy/ies to be bounded)
        ii. Spacing: 1.5 inches
        iii. Indentation: 1 inch
        iv. Margins:
            1. Top : 1 inch
            2. Left : 1.5 inches
            3. Bottom : 1 inch
            4. Right : 1 inch
            5. Gutter : 0
            6. Header : 0.5
            7. Footer : 0.5
        v. Font
            1. Sizes
                a. Heading 1 : 12
                b. Heading 2 : 12
                c. Heading 3 and Content: 11
            2. Type: strictly Times New Roman
            3. Color: Black (Automatic)
        vi. Pagination
            1. Top Right (no extra characters)
            2. No page shown on first page of every chapter
        vii. Page Breaks
            1. Page break is only used when starting a new chapter

viii. Sample Layout for Tables

Table <number [1 … n]> TABLE TITLE

xiv. Sample Layout for Figures

Figure <number [1 … n]>: **Figure Title <bold, underlined>**

6. The researchers will ensure that the proposal is refined. Please refer to the Research / Capstone Project Study Manuscript Outline in Appendix D. Research / Capstone Project Manuscript Outline.
7. The researchers will prepare 4 copies of the **Complete Proposal Manuscript** (*Deliverable D4*) for the Proposal Hearing. The **Proposal Hearing Notice Form** (*Deliverable D5 - refer to* Appendix E. Research / Capstone Project Hearing Notice Form) from the Dean's Office should be filled out and complied. This notice and the 4 copies of complete proposal manuscript must be submitted to the Adviser. Use Times New Roman, font size 12, 1.5 line spacing. Use standard 8.5" x 11" white bond paper and all margins must be 1 inch.
8. The Adviser forwards the Proposal Hearing Notice and the Complete Proposal Manuscripts to the Dean's Office.
9. The Office will then arrange the date and time of the proposal hearing and distribute the manuscripts to the identified members of the proposal hearing panel. The Dean assigns qualified and competent faculty members who will constitute the proposal-hearing panel. The proposal-hearing panel shall be composed of the following:

    1 Chairman - preferably the Dean or a faculty with at least a master's degree.

    2 Members (one may be a content expert)

10. At the end of the proposal hearing, the chair makes a synthesis and announces the panel's verdict.
11. The chairman and the adviser shall ensure that all recommendations for improvement by the proposal-hearing panel are incorporated in the Proposal Manuscript. This may include Grammar, accuracy of language, adequacy of data, interpretation of results, etc.
12. The team shall prepare and provide for the honoraria of the panel of examiners through the college secretary immediately after the proceedings.
13. The proposal is revised based on the recommendation of the panel members during the proposal hearing.
14. The adviser shall guide the student researchers throughout the conduct of the approved project proposal. The adviser is responsible for monitoring the students and ensuring that the approved project design and methodology are followed; appropriate data are gathered, analyzed and interpreted.
15. One copy of the **Revised Proposal Manuscript** (*Deliverable D6*) together with the **Grammarians Certificate** (*Deliverable D7 – refer to Appendix* F. Grammarian's Certificate Template) shall be routed to the Adviser, Panel members, and Chairman for the confirmation of revisions. **Approval Sheet** (*Deliverable D8 - refer to* Appendix G. Approval Sheet) may be routed too for their signatures if already amenable.
16. The ***hardbound*** copy containing the Approval Sheet and the **Final Proposal Manuscript** (*Deliverable D9*) with the Proposal CD (*Deliverable D10 – refer to* Appendix L. CD Labeling Format) in a CD Jacket at the inlet portion of the back cover should be submitted to the Dean's Office. The color of the hardbound is black with gold/yellow text. The Proposal CD shall contain the following:
    a. Final Proposal Manuscript (word copy) – filename: Research / Capstone Project Alias
    b. Final Proposal Manuscript (puff copy) – filename: Research / Capstone Project Alias c. Other pertinent files

Major IT 403-Capstone Project 2/ Thesis

1. The team shall submit to their adviser on time (as scheduled) the **1st prototype (30% to 50%) plus 1st draft** (*Deliverable D11*); **2nd prototype (51% to 70%) plus 2nd draft** (*Deliverable D12*); and **3rd prototype (71% to 99%) plus 3rd draft** (*Deliverable D13*) of the System/Output plus Oral Defense Manuscript, respectively. For monitoring purposes, the team shall secure the **Consultation Logs Form** (*Deliverable DX – refer to* Appendix K. Consultation Logs Form (Sample)).

2. 2) If the 3rd prototype of the System/Output reaches the appropriate percentage to completion as against major modules and features and the 3rd draft of the Oral Defense Manuscript is acceptable as evaluated and signed by the adviser through Deliverable DX, team shall then prepare and submit to the Adviser the **Oral Defense Hearing Notice** (*Deliverable D14*), 5 copies of the **ACM-Formatted Manuscript** (*Deliverable D15 - refer to* Appendix J. ACM Format) and 1 copy of the **Complete Oral Defense Manuscript** (*Deliverable D16*) ready for Oral Defense.
3. The researchers will ensure that the Complete Oral Defense Manuscript is refined which will be basis for the final ACM-Formatted Manuscript. Please refer to the Complete Oral Defense Manuscript Outline in Appendix D. Research / Capstone Project Manuscript Outline.
4. The Adviser forwards the Oral Defense Hearing Notice, 5 copies of the ACM-formatted Manuscript and 1 copy of the Complete Oral Defense Manuscript to the Dean's Office.
5. The Office will then arrange the date and time of the oral defense and distribute the ACM- formatted Manuscripts to the identified members of the oral defense panel. The Dean assigns qualified and competent faculty members who will constitute the Oral Defense panel. The Oral Defense panel shall be composed of the following:
    a. 1 Chairman - preferably the Dean or a faculty with at least master's degree.
    b. 2 Members (one may be a content expert)

6. One of the members of the Oral Defense panel may be invited from outside the University if the study requires his/her expertise.
7. During the Oral Defense, the adviser shall be the moderator who clarifies and mediates over issues raised.
8. The college secretary or a designated recorder is tasked to record all the suggestions and recommendations of the panel during the Oral Defense.
9. At the end of the Oral Defense, the chair makes a synthesis and announces the verdict.
10. The Oral Defense panel chair and the adviser shall ensure that all recommendations for improvement by the Oral Defense panel are incorporated in the final copies. This may include grammar, accuracy of language, adequacy of data, interpretation of results, etc.
11. The team shall prepare and provide for the honoraria of the panel of examiners through the college secretary immediately after the proceedings.
    a. Approval Sheet (*Deliverable D17*), this time for the IT 420 / CAPSTONE42, is necessary prior to the final submission of the manuscript and other research transcripts.

b. The researchers must submit the **2**copies of **Oral Defense CD's** (*Deliverable D18 – refer to* Appendix L. CD Labeling Format). Each of the Oral Defense CD's should contain the following:

12. Complete documentation
    a. Final Oral Defense Manuscript (word file)
    b. Final Oral Defense Manuscript (puff file)
    c. Final ACM-Formatted Manuscript (word file)
    d. Final ACM-Formatted Manuscript (word file)

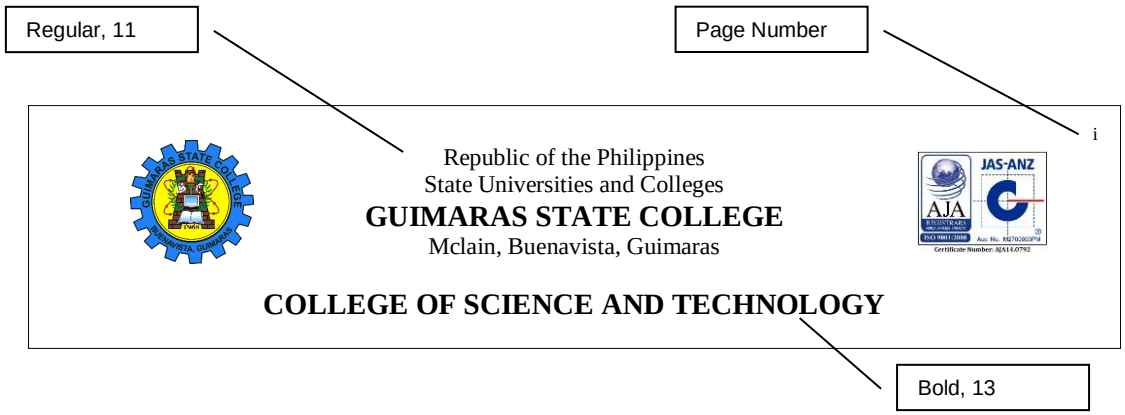
13. Developed system.
    a. Installation or Setup Files/Folders
    b. Installation and/or Users' Guide

LIST OF DELIVERABLES/ACTIVITIES

	Deliverable	Due Date
D1	**Project Team Assignments Form (**Appendix A**)**	
D2	**Pre-Proposal Statements (3 – 5) (**Appendix B**)**	
D3	**Project Working Title Form (**Appendix C**)**	
D4	**Complete Proposal Manuscript (**Appendix D**)**	
D5	**Proposal Hearing Notice Form (**Appendix E**)**	
D6	**Revised Proposal Manuscript**	
D7	**Grammarians Certificate (**Appendix F**)**	
D8	**Approval Sheet (Major IT 403) (**Appendix G**)**	
D9	**Final Proposal Manuscript (Hardbound)**	
D10	**Proposal CD (**Appendix L**)**	
DX	**Consultation Logs Form (**Appendix K**)**	
D11	**1st prototype (30% to 50%) plus 1st draft**	
D12	**2nd prototype (51% to 70%) plus 2nd draft**	
D13	**3rd prototype (71% to 99%) plus 3rd draft**	
D14	**Oral Defense Hearing Notice (**Appendix E**)**	
D15	**ACM-Formatted Manuscript (**Appendix J**)**	
D16	**Complete Oral Defense Manuscript (**Appendix D**)**	
D17	**Approval Sheet (IT 420 / CAPSTONE42)**	
D18	**2 Oral Defense CD's (**Appendix L**)**	
D19	**Individual Journals**	

Refer to Appendix D. for the Manuscript Outline

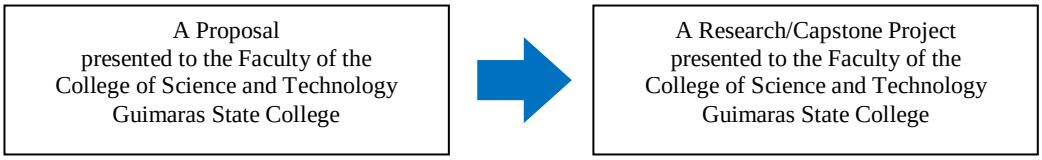
1. **Title Page** - This contains the Approved Title.
   a. **Header** – The header of the Document must be



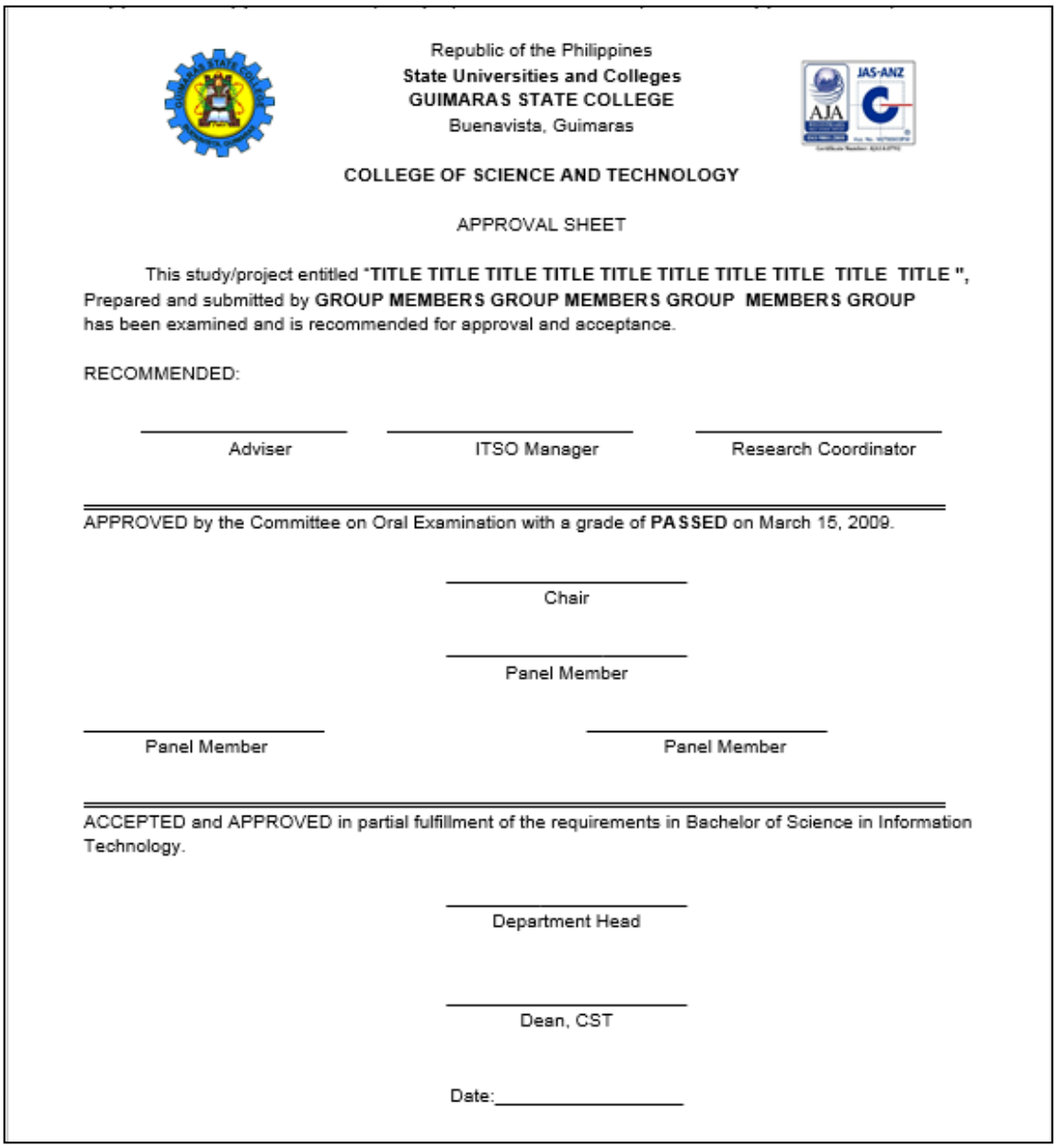
   b. After constructing the header, the researcher must designate 2 line spaces and provide the title of their study. The title must be inverted pyramid form, and it must be in uppercase format.

COLLEGE OF SCIENCE AND TECHNOLOGY ONLINE INFORMATION SYSTEM

   c. After the title of the study has been constructed, the researchers must allot 3 line spaces and construct to whom they will be presenting their study. In this case, it must be presented to the faculty of the College of Science and Technology. When the researchers are in the Title Proposal Stage, they must follow the title page template from the **Appendix G. Title Page (Proposal)**. When the proposed title is already approved by the research panel, it is time to change the title page following the **Append H. Title Page (Oral Defense).**



2. **Approval Sheet** - This serves as the proof that the research study is finished duly signed by respective panel members, and other office heads related to the research unit.



Republic of the Philippines
State Universities and Colleges
GUIMARAS STATE COLLEGE
Buenavista, Guimaras

COLLEGE OF SCIENCE AND TECHNOLOGY

APPROVAL SHEET

This study/project entitled "**TITLE TITLE TITLE TITLE TITLE TITLE TITLE TITLE TITLE TITLE**", Prepared and submitted by **GROUP MEMBERS GROUP MEMBERS GROUP MEMBERS GROUP** has been examined and is recommended for approval and acceptance.

RECOMMENDED:

Adviser | ITSO Manager | Research Coordinator

APPROVED by the Committee on Oral Examination with a grade of **PASSED** on March 15, 2009.

Chair

Panel Member

Panel Member | Panel Member

ACCEPTED and APPROVED in partial fulfillment of the requirements in Bachelor of Science in Information Technology.

Department Head

Dean, CST

Date:_____

The researchers must fill in the required fields for this sheet. In cases that one position is not applicable, it is suggested to omit the allotted space and position to make the approval sheet neat and clean.

Researchers' approval sheet will be signed by respective office heads and panel chair and members if and only if, they have fully complied the recommendations given to them after the **FINAL DEFENSE.**

3. **Dedication** – this section contains the necessary statement coming from the researchers of whom they dedicate their research studies. Ideally, it is constructed and formatted in a paragraph manner

4. **Acknowledgement** – This part of the document contains the acknowledgement of the researchers from the individuals who assisted them to develop their thesis successfully.

5. **Abstract**- This section contains the executive summary of the study of the researchers, it is usually prepared when the researchers has been approved from the final defense.

6. **Table of Contents**-this part of the research document serves as the guide to establish rapid document part tracking of the whole document. It is placed purposely for ease and convenience.

7. **List of Figures**- similar to table of contents, this is placed intendedly for easy tracking of the figures incorporated in the research document.

8. **List of Tables**- similar to table of contents and list of figures, it is included in the document for the same purpose however, it only focuses on the figures.

9. **List of Notations**- similar to the description above, however it focuses on the notations included in the research document.

10. **Chapter I-Introduction**
    a. **Background of the Study** – in section, the researchers must state the brief information about their respondents and discuss briefly the processes, problem statement will follow with which researchers are encouraged to discuss the problems they have identified. It is ideal to support the problem statements with factors that affect to justify that the problem they have identified is really a problem.

    b. **Objectives of the Project** – in this section, the research must formulate the research objectives. These objectives must serve as the solution for the problems identified. In the formulation of the objective it should follow the concept **SMART**. Specific Measureable Attainable Realistic and Time-Bound. Objectives are broken into two part, the **General Objectives** that contains all general purpose as to the aim of the researchers, and the **Specific Objectives** that serves as the supplemental objective for the general objectives. It is referred as supplemental for the aim that when the researcher will develop a certain software, the specific objectives must be the break down components that will comprise the objective of the study.
    c. **Scope and Limitations of the Project**- researchers must discuss the in this section the boundary of their study, it is usually focuses on the processes, and when it comes to the limitations of the project, researcher

must base from the scope as to the specific functions it can execute based from the processes identified from the respondent.

d. **Significance of the Project**- researchers must be in a futuristic point-of-view, it is ideal to identify who will benefit and discuss of how they will benefit the system when implemented.
e. **Definition of Terms**- researchers must identify the terms that are not easy to be understood in such a way that both researchers and other readers of the research document can understand the terms used.

11. **Chapter II-Review of Related Literature**
    a. **Theoretical Background**- in this section, researchers must state their own theory, it should base from the problem statement and objectives, to justify their theory, researchers must look for existing research studies that are parallel as to theory with their theory so that it is justified and serves as a guide form them to identify and scrutinize the related literature for their study.
    b. **Related Literature**- this section highlights all the exiting research studies that are similar to the study of the researcher. As to the requirement, researchers are advised to include 3 local, 3 national and 3 international research studies. It is also suggested to discuss thoroughly the features of each studies.
    c. **Relevance of the Literature Cited**-In this section of the document, researchers must state the comparison of the proposed over the related studies. It is also suggested to state the advantage of the proposed study. It can be an added feature or alike.

12. **Chapter III-Technical Background**
    a. **Technicality of the Project**- This must contain the discussion of the factors such as technology that are involved in the development and when the requirement of the technology after development. This must be in general point of discussion through which, the technology will be discussed but not limited as to functionality and purpose.
    b. **Details of the technologies to be used**- coherent to the technicality of the project, the technologies enumerated must be specifically discussed as to the versions and other technology related specifications.

13. **Chapter IV-Methodology**
    a. **Requirements Modeling**- the System analyst is the ideal person to identify and discuss in this section the requirements necessary for the Software development. Researchers must also discuss in this phase how they prepared their proposal. Strong System Analyses Skills is required so that the researchers can thoroughly discuss.
    b. **Data and process Modeling**
        i. **Context Diagram**- this diagram is first diagram which is part of the Data Flow Diagram. This highlight the entities that are involved to provide input data and get necessary output from the system

software. It is suggested that researchers must identify thoroughly the entities as this diagram will be the basis for exploding the data flow diagram.

ii. **Data Flow Diagram**- this diagram illustrates how and where the data will go through and what would be the return of the data being processed. There are two way of constructing the data flow diagram, the Gane-Sarson and the Yourdon and Coad Notation, and thus to establish the uniformity of the Diagram of all researchers, the BSIT Research Council recommends that researchers will use the **Gane-Sarson Notation.**

iii. **System Flowchart**- the system flowchart refers to the illustration of how the system will work, the validation and handling of system and user interaction will be the highlight of this flowchart.

iv. **Program Flowchart**- this section must contain and illustrated of how the program will flow, drafting this illustration leads the programmer of the study to interpret and code rapidly and guide them leading to the success of their study.

c. **Design**

i. **Output and User-Interface Design**

1. **Forms**- the Form must be the prototype how it will look and functions when interpreted into actual system software.
2. **Reports**- this must be a sketch and a screenshot of the reports as to how it will look like when the system is finished to be developed.

ii. **Data Design**

1. **Entity Relationship Diagram**- before the database (backend) of the system will be constructed, developers of the system must draft an entity relationship diagram to ensure that the relationship of each entities are identified well to ensure data are normalized and adaptive to data migration, flexibility in system upgrade and other necessary functions that deals with database management activity. To serve as guide for the designer of the ERD, it is suggested to refer to the designed data flow diagram as basis.

iii. **Development**

1. **Software Specification**- researchers must discuss the software they need to use in order for them to develop, it is usually Integrated Development Environment (IDE) with which, and they need to specific the basic features, and the pros and cons.
2. **Hardware Specification**- this must contain the hardware components the needs to be integrated, to give clarity, the researcher must specific each hardware component that are necessary to the software being developed.

3. **Program Specification**- Researchers of the study must specify the program that they will be developing, as to the factors, as to the requirements and other things essential for the program to be specified well.
4. **Programming Environment**
    a. **Front End**-researchers must discuss the programming language that they will be using. It is ideal that they compare the advantage and disadvantage of the chosen language. It is also suggested that the research must have a thorough knowledge and skills in their chosen programming language to establish rapid systems development in order for them to meet the requirements of every scheduled defense.
    b. **Back End**- in this section, researchers must discuss the backend technology that they will be using for the development of their system software. It is suggested that the back end of the system must be thoroughly discussed in a technical aspect to establish understanding of the technology used.

14. **Conclusions**- After the problems have been identified, studies that have been thoroughly conducted, data are analyzed, and processed into information. The researchers must state the conclusions after the conduct of the study. In this section, they must state the observation and discuss the effect of their study when implemented and justify that their study is a solution for the problems as stated.

15. **Recommendations**-this research documents contains the things that researchers have realized after the development of the system software as an output of their study. This can be a recommendations about the implementation of the system to the respondents or a recommendation about the improvement of the current system or a combination.

16. **Bibliography**-this section contains the citing of references that has been used by the researchers following the citing references of the ACM Format.
17. **Appendices**
    a. **Relevant Source Code**- this section contains the source code but NOT all source code must be included, ideally only those that has direct relationship with the research objectives.
    b. **Evaluation Tool**- this serves as the area of the document where researchers must attach the evaluation tool, this can either be a questionnaire and other testing forms to evaluate the research study and the system developed**.**
    c. **Sample Input/Output/Reports**- this contains the screenshots of the input forms, output and generated reports. This illustrates how the system operates starting from the acceptance of the input data to processing of information and generation of reports.

d. **Users Guide**- since the Information Technology Research studies are developmental and build software, researchers must develop and attach user guide in this document to let Non-Researcher both IT and Non-IT to be guided with the use of their developed software.
e. **Other Relevant Documents**- in cases that researchers has special documents that are significant and necessary to be attached but not specifically stated in the list of appendices, they can integrate those various documents in this section.
f. **Accomplished Forms**
    i. **Deliverables**- this section serves as the timeline of the researchers when they have accomplished their tasks.
g. **Curriculum Vitae**- this is where the curriculum vitae of the researchers must be attached.

18. **Glossary**-this section contains the list of terms or word found in or relating to a specific subject, text, or dialect with explanations, a brief dictionary.

Appendix A. Project Team Assignments Form

***Accomplish in 3 copies

Group #	

Name and Signature	Project Role	Email address/ Mobile Number	EDP Code / Subject Teacher

Appendix B. Pre-Proposal Statement Template

NOTE: 1 for each of the 3 titles chosen by the adviser (strictly word-processed and comprehensive)

Project Title:	
Proponents/Researchers:	1. 2. 3. 4. 5.
Proponent of the Study	
Statement of the Problem	
Objectives of the Study	General: Specific:
Scope of the Study:	
Limitations of the Study:	
Project Design/ Development Plan:	• Program Specification • Software Specification • Hardware Specification

Appendix C. Project Working Title Form

Proponents/Researchers:

1.
2.
3.
4.
5.

Proposed Project Title:

Submitted by: **PROJECT MANAGER** Adviser Date_____	**Noted:** **ADVISER A. ADVISER** Adviser Date_____
Recommending Approval: **SIMEON J. CAINDAY III, MMIT, MBA** Research Coordinator, BSIT Date_____	**Approved:** **SIMEON J. CAINDAY III, MMIT, MBA** Dean, College of Science and Technology Date_____

***Accomplish in 3 copies

Appendix D. Research / Capstone Project Manuscript Outline

Title Page
Approval Sheet
Dedication
Acknowledgement
Executive Summary or **Abstract**
Table of Contents (strictly use MS Word Table of Contents feature)
List of Figures
List of Tables
List of Notations (optional)
Chapter I – Introduction (consistent for Basic IT 301 and Major IT 403)

- Background of the Study
- Objectives of the Project
- Scope and Limitations of the Project
- Significance of the Project
- Definition of Terms

Chapter II – Review of Related Literature (consistent for Basic IT 301 and Major IT 403)

- Theoretical Background
- Related Literature
- Relevance of the Literature Cited

Chapter III – Technical Background (consistent for Basic IT 301 and Major IT 403)

- Technicality of the project
- Details of the technologies to be used

Chapter IV – Methodology
(initial for Basic IT 201 and final for Major IT 403; choose only the parts that are applicable)

- Requirements Modeling
- Data and Process Modeling
    - Context Diagram
    - Data Flow Diagram
    - System Flowchart
    - Program Flowchart (highlights only)
- Design
    - Output and User-Interface Design
        - Forms
        - Reports
    - Data Design
        - Entity Relationship Diagram (logical interpretation)
    - Development
        - Software Specification
        - Hardware Specification

        - Program Specification
        - Programming Environment
            - Front End
            - Back End

Conclusions (only in Major IT 403)

Recommendations (only in Major IT 403)

BIBLIOGRAPHY

APPENDICES (initial for Basic IT 301 and final for Major IT 403)

- Relevant Source Code
- Evaluation Tool
- Sample Input/Output/Reports
- Users Guide
- Other Relevant Documents
- Accomplished Forms
    - D1, D2 (chosen title), D3, D5, D7, DX, D14, D15
- Curriculum Vitae

GLOSSARY (initial for Basic IT 301 and final for Major IT 403)

Appendix E. Grammarian's Certificate Template

Republic of the Philippines
State Universities and Colleges
GUIMARAS STATE COLLEGE
Buenavista, Guimaras

COLLEGE OF SCIENCE AND TECHNOLOGY

October 15, 2009

G R A M M A R I A N' S C E R T I F I C A T E

This is to certify that the undersigned has reviewed and went through all the pages of the proposed project study / research entitled "**TITLE TITLE TITLE TITLE TITLE**" as against the set of structural rules that govern the composition of *sentences*, *phrases*, and *words* in the English language.

Signed:

MR. GRAMMAR G. GRAMMAR
Grammarian

Conforme:

PROJECT P. MANAGER
Project Manager

Appendix F. Approval Sheet (Sample) – RDS Form-S-12 (Standard Approval Sheet)-REVISED

Republic of the Philippines
State Universities and Colleges
GUIMARAS STATE COLLEGE
Buenavista, Guimaras

COLLEGE OF SCIENCE AND TECHNOLOGY

APPROVAL SHEET

This study/project entitled "**TITLE TITLE TITLE TITLE TITLE TITLE TITLE TITLE TITLE TITLE ",** Prepared and submitted by **GROUP MEMBERS GROUP MEMBERS GROUP MEMBERS GROUP** has been examined and is recommended for approval and acceptance.

RECOMMENDED:

Adviser	ITSO Manager	Research Coordinator

APPROVED by the Committee on Oral Examination with a grade of **PASSED** on March 15, 2009.

Chair

Panel Member

Panel Member	Panel Member

ACCEPTED and APPROVED in partial fulfillment of the requirements in Bachelor of Science in Information Technology.

Department Head

Dean, CST

Date:_____

Appendix G. Title Page (Proposal)

COLLEGE OF SCEINCE AND TECHNOLOGY
ONLINE INFORMATION
SYSTEM
(Must be inverted pyramid form, all caps)

A Proposal
presented to the Faculty of the
College of Science and Technology
Guimaras State College

In Partial Fulfillment of the Requirements
for the degree Bachelor of Science in Information Technology

By
Member 1
Member 2
Member 3
Member 4
Member 5

Mr. Adviser A. Adviser
Adviser

March 2016
(the batch month and year)

Appendix H. Title Page (Oral Defense)

COLLEGE OF SCEINCE AND TECHNOLOGY
ONLINE INFORMATION
SYSTEM
(Must be inverted pyramid form, all caps)

A Research/Capstone Project
presented to the Faculty of the
College of Science and Technology
Guimaras State College

In Partial Fulfillment of the Requirements
for the degree Bachelor of Science in Information Technology

By
Member 1
Member 2
Member 3
Member 4
Member 5

Mr. Adviser A. Adviser
Adviser

March 2016
(the batch month and year)

`

Appendix I. (Oral Defense Evaluation Criteria)

Republic of the Philippines
State Universities and Colleges
GUIMARAS STATE COLLEGE
Buenavista, Guimaras

COLLEGE OF SCIENCE AND TECHNOLOGY
Office of the Information Technology Research Council

Capstone Project Proposal with Content Rating Sheet

Date: Rating:
Title:
Researchers
1.
2.
3.
4.
5.

A. Group Rating

Capstone Project Proposal Manuscript (group/team grade) 40%		**Actual Rating**
Initial Pages • Table of contents is consistent • Acknowledgement is brief and formal • Abstract is brief but complete	2	
Chapter 1 • Introduction is intact and provides clear overview of the entire Research / Capstone Project • Statement of the Problem/ Objects is SMART • Scope and Limitation of the Research / Capstone Project are clearly defined	10	
Chapter 2 • Related literatures are recent and relevant • Anchor provides solid background of the Research / Capstone Project • Auxiliary theories are evident • Sources are appropriately cited and noted • Related studies are relevant and includes global and local scope	5	
Chapter 3 • There should be comprehensive discussions on the technologies (hardware/software) involved in the Research / Capstone Project and its related Research / Capstone Projects in the past	5	
Chapter 4 • Methodology strictly follows the SDLC (esp. for Software Development) • Methodology includes project management techniques appropriate for the	10	

chosen Research / Capstone Project. • Requirements Specification is more or less complete and answers the objectives • Design Tools used are relevant and appropriate which should be based on requirements • Development Plan is concrete and should be consistent with the Design • Testing techniques to be used should assess all aspects of the developed Research / Capstone Project • Implementation Plan should be aligned with the objectives		
Final Pages • Findings and Conclusions are attuned with the objectives • Recommendations are feasible and practical • Terms in the glossary are defined operationally • Bibliography should be in MLA Format • Appendices are relevant and help support the principal content • Glossary should be arranged alphabetically and defined operationally	3	
Manuscript Mechanics • Organization and Fluidity of ideas are apparent • Formatting and layout are consistent • All parts of the manuscript should be grammatically correct	5	

B. Individual Rating

Researcher	Comprehensiveness of the Answer/Ideas **(10)**	Contribution/Support to the Team **(7)**	Delivery/Command of the English Language **(3)**	**Total (20)**
1.				
2.				
3.				
4.				
5.				

Name/Signature of Panel

Appendix J. (Oral Defense Evaluation Criteria)

Republic of the Philippines
State Universities and Colleges
GUIMARAS STATE COLLEGE
Buenavista, Guimaras

COLLEGE OF SCIENCE AND TECHNOLOGY
Office of the Information Technology Research Council

Capstone Project Proposal with Content Rating Sheet
(Adviser's Grade)

Date:_____

A. Group Rating

Group #	Initial Page (2)	Chapter 1 (10)	Chapter 2 (5)	Chapter 3 (5)	Chapter 4 (10)	Final Pages (3)	Manuscript Mechanics (5)	Total (40)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

B. Individual Rating

Researcher	Comprehensiveness of the Answer/Ideas (10)	Contribution/Support to the Team (7)	Delivery/Command of the English Language (3)	Total (20)
1.				
2.				
3.				
4.				
5.				

Name/Signature of Adviser

Appendix K. (Oral Defense Evaluation Criteria)

Republic of the Philippines
State Universities and Colleges
GUIMARAS STATE COLLEGE
Buenavista, Guimaras

COLLEGE OF SCIENCE AND TECHNOLOGY
Office of the Information Technology Research Council

Capstone System Oral Defense Rating Sheet

Date: Rating:
Title:
Researchers
1.
2.
3.
4.
5.

A. Group Rating

Capstone Project Proposal Manuscript (group/team grade) 40%		**Actual Rating**
The output should be consistent with the objectives as defined during the proposal stage	25	
All major modules and features of the system's output as defined after the proposal stage are delivered. The credit shall be based on the percentage of delivered items.	25	
Group Debugging • The team shall display competence in resolving planted bugs	10	

Name/Signature of Panel

Appendix L. (CD Labelling)

NOTE:

1. Use Sticker for the LABEL
2. SUBMIT with CLEAR CASING
3. Add numbering in CD Label if more than 1
4. CDs/DVDs that do not follow above format will not be accepted.

Download the Template in PSD Format from this link . goo.gl/vV5WaE

Appendix M. (ACM-[Association for Computing Machinery**] Format)**

ACM Word Template for SIG Site

1st Author
1st author's affiliation
1st line of address
2nd line of address
Telephone number, incl. country code
1st author's E-mail address

2nd Author
2nd author's affiliation
1st line of address
2nd line of address
Telephone number, incl. country code
2nd E-mail

3rd Author
3rd author's affiliation
1st line of address
2nd line of address
Telephone number, incl. country code
3rd E-mail

ABSTRACT

In this paper, we describe the formatting guidelines for ACM SIG Proceedings.

CCS Concepts

• **Information systems→Database management system engines** • **Computing methodologies→Massively parallel and high-performance simulations.** This is just an example, please use the correct category and subject descriptors for your submission. The ACM Computing Classification Scheme:

http://www.acm.org/about/class/class/2012. Please read the HOW TO CLASSIFY WORKS USING ACM'S COMPUTING CLASSIFICATION SYSTEM for instructions on how to classify your document using the 2012 ACM Computing Classification System and insert the index terms into your Microsoft Word source file.

Keywords

Keywords are your own designated keywords separated by semicolons (";").

1. INTRODUCTION

The proceedings are the records of the conference. ACM hopes to give these conference by-products a single, high-quality appearance. To do this, we ask that authors follow some simple guidelines. In essence, we ask you to make your paper look exactly like this document. The easiest way to do this is simply to download a template from [2], and replace the content with your own material.

2. PAGE SIZE

All material on each page should fit within a rectangle of 18 × 23.5 cm (7" × 9.25"), centered on the page, beginning 1.9 cm (0.75") from the top of the page and ending with 2.54 cm (1") from the bottom. The right and left margins should be 1.9 cm (.75"). The text should be in two 8.45 cm (3.33") columns with a .83 cm (.33") gutter.

Conference'10, Month 1–2, 2010, City, State, Country.

DOI: http://dx.doi.org/10.1145/12345.67890

3. TYPESET TEXT

1. Normal or Body Text

Please use a 9-point Times Roman font, or other Roman font with serifs, as close as possible in appearance to Times Roman in which these guidelines have been set. The goal is to have a 9-point text, as you see here. Please use sans-serif or non-proportional fonts only for special purposes, such as distinguishing source code text. If Times Roman is not available, try the font named Computer Modern Roman. On a Macintosh, use the font named Times. Right margins should be justified, not ragged.

2. Title and Authors

The title (Helvetica 18-point bold), authors' names (Helvetica 12-point) and affiliations (Helvetica 10-point) run across the full width of the page – one column wide. We also recommend phone number (Helvetica 10-point) and e-mail address (Helvetica 12-point). See the top of this page for three addresses. If only one address is needed, center all address text. For two addresses, use two centered tabs, and so on. For more than three authors, you may have to improvise.[1]

3. First Page Copyright Notice

Please leave 3.81 cm (1.5") of blank text box at the bottom of the left column of the first page for the copyright notice.

4. Subsequent Pages

For pages other than the first page, start at the top of the page, and continue in double-column format. The two columns on the last page should be as close to equal length as possible.

Table 1. Table captions should be placed above the table

Graphics	Top	In-between	Bottom
Tables	End	Last	First
Figures	Good	Similar	Very well

5. References and Citations

Footnotes should be Times New Roman 9-point, and justified to the full width of the column.

[1] If necessary, you may place some address information in a footnote, or in a named section at the end of your paper.

Use the "ACM Reference format" for references – that is, a numbered list at the end of the article, ordered alphabetically and formatted accordingly. See examples of some typical reference types, in the new "ACM Reference format", at the end of this document. Within this template, use the style named *references* for the text. Acceptable abbreviations, for journal names, can be found here: http://library.caltech.edu/reference/abbreviations/. Word may try to automatically 'underline' hotlinks in your references, the correct style is NO underlining.

The references are also in 9 pt., but that section (see Section 7) is ragged right. References should be published materials accessible to the public. Internal technical reports may be cited only if they are easily accessible (i.e. you can give the address to obtain the report within your citation) and may be obtained by any reader. Proprietary information may not be cited. Private communications should be acknowledged, not referenced (e.g., "[Robertson, personal communication]").

6. Page Numbering, Headers and Footers

Do not include headers, footers or page numbers in your submission. These will be added when the publications are assembled.

4. FIGURES/CAPTIONS

Place Tables/Figures/Images in text as close to the reference as possible (see Figure 1). It may extend across both columns to a maximum width of 17.78 cm (7").

Captions should be Times New Roman 9-point bold. They should be numbered (e.g., "Table 1" or "Figure 2"), please note that the word for Table and Figure are spelled out. Figure's captions should be centered beneath the image or picture, and Table captions should be centered above the table body.

5. SECTIONS

The heading of a section should be in Times New Roman 12-point bold in all-capitals flush left with an additional 6-points of white space above the section head. Sections and subsequent sub- sections should be numbered and flush left. For a section head and a subsection head together (such as Section 3 and subsection 3.1), use no additional space above the subsection head.

1. Subsections

The heading of subsections should be in Times New Roman 12-point bold with only the initial letters capitalized. (Note: For subsections and subsubsections, a word like *the* or *a* is not capitalized unless it is the first word of the header.)

1. Subsubsections

The heading for subsubsections should be in Times New Roman 11-point italic with initial letters capitalized and 6-points of white space above the subsubsection head.

1. Subsubsections

The heading for subsubsections should be in Times New Roman 11-point italic with initial letters capitalized.

2. Subsubsections

The heading for subsubsections should be in Times New Roman 11-point italic with initial letters capitalized.

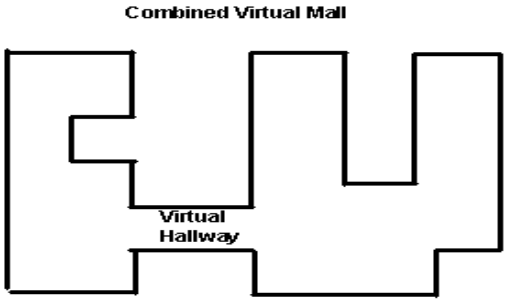


Figure 1. Insert caption to place caption below figure.

6. ACKNOWLEDGMENTS

Our thanks to ACM SIGCHI for allowing us to modify templates they had developed.

7. REFERENCES

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Columns on Last Page Should Be Made As Close As Possible to Equal Length