

Graduate Student Research Handbook



**AUGUSTA
UNIVERSITY**

**Master of Health Science in
Clinical Laboratory Science**

**Department of Undergraduate Health Professions
College of Allied Health Sciences**

**Augusta University
Augusta, Georgia**

Revised 06/07/2022

PREFACE

This Graduate Student Handbook serves as a guide for students enrolled in the Master of Health Science in Clinical Laboratory Science (MHS-CLS) Program in the Department of Undergraduate Health Professions (UHP) at Augusta University (AU). The [UHP Department Student Manual](#) (Clinical Laboratory Science, Radiation Therapy, and Nuclear Medicine Technology) found under current students on the UHP webpage, is also used as a guide for graduate students. Throughout this Graduate Student Research Handbook references will be made to certain policies that are in the [UHP Department Student Manual](#). Graduate students will need to be familiar with and follow the guidelines in both manuals.

Information in this handbook and in the Student Manual are **not** inclusive of all student requirements at Augusta University. Students should obtain and become familiar with other AU publications directed to students: the [AU Student Manual](#) (under Current Students), and the [Augusta University Catalog](#).

SCHOLASTIC REGULATIONS AND PROCEDURES

Student registration and class attendance constitutes an agreement to comply with the rules and regulations of the Department and Augusta University. The student has access to the current program [UHP Department Student Manual](#) on the UHP webpage. Augusta University's rules and regulations are published in the catalog and other official publications of the university.

Grades, Academic Performance, and Progress

The policy of the Department of UHP MHS-CLS Program regarding satisfactory academic standing is as follows:

Students must earn a grade of "C" or higher in all courses to progress within the program.

The Instructor of Record will inform a student in writing of unsatisfactory academic progress or unsatisfactory academic conduct and copy the CLS Program Director and UHP Department Chair. If an unsatisfactory academic progress or unsatisfactory academic conduct issue should arise with a student, the Instructor's Counseling Form may be used to document the meeting with the student.

The students enrolled in the MHS-CLS Program must also earn a "C" or higher in all courses to progress. However, in addition to this requirement graduate students must also maintain a

cumulative grade point average (GPA) of at least a 2.8 (on a 4.0 scale) for all courses attempted. The CLS Program Director will monitor students' GPA and inform a student in writing of unsatisfactory academic progress or unsatisfactory academic conduct and copy the UHP Department Chair.

Academic Probation and Possible Dismissal

Any MHS-CLS student who's cumulative GPA drops below a 2.8 is placed on academic probation. Such status is noted on the student's academic record (transcript). While on probation, the student **must** earn a minimum of a 3.0 each semester until the cumulative GPA is raised to at least a 2.8.

Students who fail to earn at least a 3.0 each semester, while on academic probation shall be forwarded to the Program Director's Group (PDG – Clinical Laboratory Science, Nuclear Medicine Technology, and Radiation Therapy) for review.

Therefore, the following two instances listed in this section of the Handbook will warrant review of the student's academic performance by the PDG. These two instances are:

- a. The student did not receive a C or better in one or more of the program required courses;
- b. After the student's cumulative GPA fell below the minimum 2.8 and the student was placed on academic probation, the student failed to earn at least a 3.0 each subsequent semester until the required minimum cumulative 2.8 GPA was met.

Any student dismissed from the Department of UHP MHS-CLS Program may appeal the action in accordance with the procedure described in the [UHP Department Student Manual](#) found under *Student Rights and Due Process*.

Academic Integrity and Honesty

The Department of UHP also addresses issues related to Academic Honesty. Each MHS-CLS student must follow Augusta University's **Academic Conduct** policy:

The University recognizes that honesty and integrity are necessary to its academic function. The following regulations protect the equity and validity of the university's grades and degrees, and help students develop ethical standards and attitudes appropriate to academic and professional life.

Violations of academic honesty include cheating of all kinds, plagiarism, fraudulent research activity and/or scholarship, collusion, and false statements made to avoid negative

academic consequences.

- **Cheating**
 - Cheating on course examinations or assignments is prohibited; including but not limited to the following:
 - Possessing, using, or exchanging improperly acquired information, whether in written or oral form, in the preparation of any essay, laboratory report, or other assignment in an academic course, or in preparing for any examination in a course.
 - Copying from another student's paper.
 - Use of prepared materials, notes, or texts other than those specifically permitted by the instructor during the examination.
 - Collaboration with another student during an examination, unless such collaboration is explicitly allowed by the course instructor for the examination in question.
 - Unapproved use of any technological device to gain or provide advantage on an examination, lab practical, or other assignment to be submitted for academic credit.
 - Substituting for another person during an examination or allowing someone else to substitute for you.
 - Solicitation or bribery of any person to obtain examination information.
- **Plagiarism**
 - Plagiarism is prohibited. Themes, essays, term papers, tests, presentations, creative works, and similar work submitted to satisfy course and program requirements must be the personal work of the student submitting it. Plagiarism is the failure to acknowledge indebtedness to the authors/creators of works used to complete such assignments and/or other course requirements. It is always assumed that the work offered for evaluation and credit is the student's own unless otherwise acknowledged. Such acknowledgment should occur whenever one quotes another person's actual words; whenever one appropriates another person's ideas, opinions, or theories, even if they are paraphrased; and whenever one borrows facts, statistics, or other illustrative materials, unless the information is common knowledge. Further, it is expected, in the production of creative work, that the student's work products are original, and that any images, sounds, or other intellectual properties that are not the original work of the student will be used fairly and with acknowledgement of the original source(s).
- **Research Misconduct**
 - Research Misconduct is prohibited. Misrepresentation of data collection and analysis, including falsification, fabrication or omission of data is prohibited. Augusta University Policy for Responding to Allegations of Research Misconduct applies to students.
- **Collusion**

- Collusion is unauthorized assistance from or collaboration with another person in the preparation or editing of notes, themes, reports, or other written work or in laboratory work offered for evaluation and credit, unless such assistance or collaboration is specifically approved in advance by the instructor. In cases of collusion, both the provider and recipient of such assistance are in violation of this academic conduct policy. However, students are authorized to use appropriate campus resources in the completion of written work (e.g., the campus Writing Center). Unless stated otherwise by the course instructor, use of such campus resources does not constitute academic misconduct under this policy. However, no student, except those working in a tutorial capacity in a University-approved academic support center, will knowingly give or receive unauthorized assistance in the preparation of any assignment, essay, laboratory report or examination to be submitted for credit in an academic course.
- **False statements**
 - False statements made to avoid negative academic consequences include oral and/or written statements designed to obfuscate, misrepresent, or otherwise distort the presentation of facts related to a student's academic conduct in a course or program of study. Examples of such false statements include, but are not limited to, oral or written documentation providing willfully inaccurate information related to attendance, course work, examinations, and/or other course requirements enumerated in the syllabus of the particular course for which such a statement is provided.

While these acts constitute assured instances of academic misconduct, other acts of academic misconduct may be defined by the professor in his/her course syllabus.

Professionalism Expectation and Student Conduct

Professional Expectations are required of all students, both graduate and undergraduate. Students are provided with professional expectations with regards to motivation, attitude, integrity, communication, self-worth/assessment, independence/leadership, and altruism at the beginning of the program. Please refer to the student Professionalism Policy in the [UHP Department Student Manual](#).

This policy also outlines what is considered to be “Urgent Behavioral Circumstances” defined as an egregious violation of the AU Non-Academic Code of Conduct Policy (See the [AU Student Manual](#)) or Department Professionalism Policy in the [UHP Department Student Manual](#) will require immediate action. If the graduate student has not met the requirements of the Student Conduct Code or is considered to have behavioral issues that faculty have observed that cast grave doubts upon his/her potential capabilities as a practitioner in the field of training, the Department

Of UHP may submit a written recommendation to the Dean of the CAHS for interim suspension while charges are pending.

Please see the AU Student Manual Section 2.8 (Interim Suspension While Charges Pending) available at [UHP Department Student Manual](#).

Additional Policies

This Departmental Graduate Student Research Handbook is to be used in conjunction with the [UHP Department Student Manual](#). Policies within this manual are to be followed at all times and will be used by the Departmental Faculty, the PDG, and the Chair. However, faculty may have more stringent requirements for their courses, and if there are more stringent guidelines these will be outlined in their course syllabi. There will also be instances where the guidelines outlined in the Graduate Student Research Handbook are more stringent than those listed in the [UHP Department Student Manual](#). For these instances, the Graduate Student Research Handbook guidelines will take precedence over these other policies.

Other policies listed in the [UHP Department Student Manual](#) that will not be discussed in this handbook are:

- a. Course Exemption Policy
- b. Assignment Policy
- c. Attendance Policy
- d. Student Leave Policy
- e. Student Pregnancy Policies and Procedures
- f. Clinical/Laboratory Dress Code Policy
- g. Grading Policy
- h. Student Professionalism Policy
- i. Standardized Course Syllabus Policy
- j. Criminal Background Checks Policy
- k. Drug Screen Policy
- l. Student Grievance Policies and Procedures Policy
- m. Laptop Policy

DIRECTOR OF GRADUATE STUDENT RESEARCH

The Chair of the Department of UHP has appointed the Department's Director of Graduate Student Research for the MHS-CLS Degree. This Faculty Member will, advise students concerning requirements and procedural steps in the degree program, and ensuring the students are completing the required steps outlined in the Research Project Process.

MAJOR RESEARCH ADVISORS

A faculty member will be selected by each student as his/her Major Research Advisor at the end of the second semester or no later than the beginning of the third semester. The Major Research Advisor must be a faculty within the Clinical Laboratory Science Program. However, the Director of Graduate Student Research and the UHP Department Chair may grant permission to appoint a faculty outside the department to serve as Major Research Advisor. The Major Research Advisor will provide oversight of the student's graduate project, which includes assisting the student in selecting and pursuing the research topic, oversight in the preparation of the project, oversight of the student's application for review of the research proposal by the Institutional Review Board, oversight through the completion of the project, and oversight of the writing and presentation of the project. The Major Research Advisor will also provide critical review and grading of the project and will ensure that the student has completed all required paperwork outlined in the Research Project Process. The Major Research Advisor must have completed any applicable Collaborative Institutional Training Initiative (CITI training) <https://www.augusta.edu/research/human-research-program/training-hsr.php> .

ADDITIONAL RESEARCH FACULTY

The student, upon advisement of the Major Research Advisor, may choose one additional member to serve with the Major Research Advisor in oversight and grading of the graduate project. This member may be faculty within the Department of UHP – Clinical Laboratory Science program, within the College of Allied Health Science, or within the University or the member may be a clinical faculty member at one of the many clinical affiliates used for training the department's graduate students. Additional Research Faculty must also have completed any applicable Collaborative Institutional Training Initiative (CITI training) <https://www.augusta.edu/research/human-research-program/training-hsr.php>.

RESEARCH PROJECT, PROPOSAL, PRESENTATION, PAPER

Research Project

The research project is the culmination of the MHS-CLS Program curriculum requirements. The student will use information obtained from specific program coursework, the Evidence Based Practice course, and the literature to craft a well-defined research question that the student, through research, can answer. The student will then present and defend the results of this investigation in a formal venue and complete a research paper of publishable quality.

The research projects can be on a variety of topics, including but not limited to: evidenced-based research, traditional scientific inquiries, program development research, information technology based research, educational research, and clinical services delivery-based research. Because of the varied nature of the research projects, it is imperative that the student obtain approval from the Major Research Advisor, Research Faculty Member, Director of Graduate Student Research, and the Chair regarding the research question and expected project outcomes.

Research Proposal

The research proposal is a research plan that serves as the basis for the research project. The proposal is written by the student and approved by the Major Research Advisor, Research Faculty Member, Director of Graduate Student Research, and the UHP Department Chair. The Research Proposal will include the following areas:

1. Purpose of the Study
 - a. Concise statement of the background
 - b. Rationale
 - c. Nature and significance of the proposed study
2. Specific Aims
 - a. State the specific objectives of the study (research question)
3. Study Design should describe in brief paragraph, outline or graphic form, the following:
 - a. Study design
 - b. Identify control and experimental groups
 - c. Procedures to be used
 - d. Duration and sequence of treatment schedules
 - e. Analysis of data (to include statistical tools to be used for data analysis)
 - f. Description of procedures being performed already for diagnostic or treatment purposes

4. Literature citations at the end of the research proposal for any work referenced in the proposal.
5. Human Subjects

Provide rationale for the choice of any procedures involving human subjects, records, surveys, tissues or other human derived materials. Refer to *IRB Policies and Procedures*, <https://www.augusta.edu/research/human-research-program/training-hsr.php> for additional information.

Research Presentation

After completion of the research project the graduate student will be required to present findings from the research project in a formal venue. The formal venue will be decided by the Major Research Advisor and the Director of Graduate Student Research. This communication of findings should be prepared in a presentation format (such as Power Point) and should be approximately 20-25 minutes in length.

The following elements should be included in the presentation:

1. Research question or hypothesis
2. Review of relevant literature
3. Importance of study
4. Research procedure
5. Data collection
6. Research Findings
7. Conclusions
8. Significance of findings
9. References

Research Paper

The research paper is the final part of the research project. This is a formal research paper that should characterize, in a scholarly manner, the importance of this information as it applies to the field of study. This paper should report findings judged by responsible research faculty to be competitive for publication in a peer-reviewed journal. Unless otherwise specified by the research advisor all papers will be written in the publication style for Clinical Laboratory Science journal <http://clsjournal.ascls.org/content/authors>. Articles will only be submitted for publication by the research advisors.

The paper should include the following sections:

1. Abstract
2. Introduction
 - a. Background
 - b. Importance of study
 - c. Purpose of study
3. Literature Review
4. Methodology
 - a. Research question or hypothesis
 - b. Sample
 - c. Population
 - d. Data collection procedures
 - e. Statistical analyses used
5. Results
6. Conclusions
 - a. Interpretation of results
 - b. Research findings – Answers to research question
 - c. Significance of findings
 - d. Conclusions
7. References

MHS-CLS students will submit papers in the style and format described in the *Publication Manual of the American Psychological Association* (6th edition) published by the American

Psychological Association, Washington, DC, in 1994.

The Publication Manual (6th edition) had several errors. Please refer to the attached link for a discussion corrections. <http://supp.apa.org/style/pubman-reprint-corrections-for-2e.pdf>.

RESEARCH PROJECT PROCESS

The research project will be the culmination of the student's graduate program curriculum. The specific courses within the curriculum that are utilized to guide development and completion of the research project are:

- 1st semester: STAT 6300 Introduction to Epidemiology and Biostatistics
- 2nd semester: CAHS 6501 Evidence Based Practice
- 3rd semester: CAHS 6503 Research Process
- 4th semester: CAHS 6524 Project Development
- 5th semester: CAHS 7523 Research Project

In the course CAHS 6501 Evidence Based Practice, the student will develop a research question and begin performing literature reviews on the research topic. Collaborative Institutional Training Initiative (CITI training) <https://www.augusta.edu/research/human-research-program/irb/> will be completed by student(s) during this course.

CAHS 6503 Research Process will provide the students with the tools needed to develop their research proposal or plan. This will serve as the basis for their research project and will require guidance from their Major Research Advisor. The proposal must conform to the *research policies* of AU, Augusta University Medical Center, and Charlie Norwood VA Medical Center.

CAHS 6524 Project Development is the course, that upon IRB approval (see below) and approval from the Major Research Advisor, the Director of Graduate Student Research, and the Chair, the student will, with oversight, be allowed to conduct their research.

The CAHS 7523 Research Project course will allow time for the student to complete their research, finish the research paper, and present the research findings. For this course, the student will be required to present their research findings in a formal venue and complete a research paper reporting findings, judged by responsible research faculty, to be competitive for publication in a peer-reviewed journal. The venue for presentation will be determined by the

Major Research Advisor and the Director of Graduate Student Research.

Institutional Review Board (IRB) Office

The Augusta University IRB is charged with reviewing all research studies involving human subjects. This includes, but is not limited to, studies involving:

- Human experimentation
- Records
- Surveys
- Tissues or other human derived materials

IRB oversight requirements apply to all research conducted at AU, Augusta University Medical Center, and Charlie Norwood VA Medical Center or by faculty, staff or students of those institutions.

The AU IRB has developed a process for beginning a research project. Go to <https://www.augusta.edu/research/human-research-program/irb/> then click on the blue “How to Submit a New Study” bar in the middle of the page. You will be provided with step-by-step instructions. Depending on your research, you may also want to check the blue link, “How to Submit a Human Subjects Determination”.

All steps are included in the IRBNet submission process. Every graduate student is required to submit appropriate information regarding human research protection through this process for review and approval.

Department's Approval to Conduct Research

No research will be conducted until the student receives approval from the IRB and approval from the Major Research Advisor, the Department’s Director of Graduate Student Research and from the UHP Department Chair.

- a. The student must submit the Research Proposal and the completed “Project Research Proposal Form” signed by the Major Research Advisor and Additional Research Faculty to the Director of Graduate Student Research.

- b. The student may then submit the required IRB application.
- c. The student, upon IRB approval, must present a copy of the IRB Approval Letter to the Director of Graduate Student Research for permission to conduct the research.

Upon receipt of the documents, the Director of Graduate Student Research will review all paperwork and if approved the Director of Graduate Student Research and UHP Department Chair will sign the “Project Research Proposal Form.” The original document will be placed in the student’s folder; copies will be given to the student, Major Research Advisor, and to the Chair. Once the student has received this form, signed by the Director of Graduate Student Research and the UHP Department Chair, he/she will be allowed to implement research and collect data.

Research Project Completion

Upon completion of the research project, the paper, and the formal presentation the student will present to the Director of Graduate Student Research the “Project Research Completion Form” signed by the Major Research Advisor and Additional Research Faculty. At the end of an IRB approved study, the student must also complete the Continuing Review form via IRBNet indicating that the current status of the research project is closed and submit a copy of the continuing review to the Director of Graduate Student Research.

GRADUATION

Application for Graduation

Each candidate for a graduate degree program must apply for graduation. The Application for Graduation Form is available through the Registrar’s Office. Please read the application carefully and provide ALL requested information. This application informs the Department and the Registrar’s office whether or not the student will be attending May graduation. Additional information will be collected by the department to determine if the student will participate in the College of Allied Health Sciences hooding ceremony.

Satisfactory Fulfillment of All Degree Requirements

Satisfactory fulfillment of all course requirements for the MHS-CLS degree will be determined by the student’s CLS Program Director. The Director of Graduate Student

Research will determine if the student has met the research requirements for the MHS-CLS degree. For the research requirements, the student's file must contain the following:

- a. Completed and Signed Project Research Proposal Form
- b. Research Proposal
- c. Signed IRB Approval Form
- d. Completed and Signed Project Research Completion Form
- e. Final Research Paper
- f. Signed Final Report for IRB Termination or Student Completion Form

These completed documents must be in the department's student folder a minimum of one (1) week prior to graduation. Once the student has completed all course requirements, research requirements, and has completed all paperwork, the UHP Department Chair will write a letter to the Registrar's office recommending the student for graduation.

**RESEARCH PROJECT CHECKLIST FOR STUDENTS
ENROLLED IN THE MASTER OF HEALTH SCIENCE IN
CLINICAL LABORATORY SCIENCE PROGRAM**

Date	Procedure	Deadline for Completion
	Program Entry Date	1 st semester (fall)
	Major Research Advisor Selected – Form Submitted to Director of Graduate Student Research	2 nd semester (spring)
	Additional Research Faculty Member Selected	2 nd semester (spring)
	IRB Education Completed (CITI training)	2 nd semester (spring)
	Completed Project Research Proposal Form and Research Proposal Submitted to Director of Graduate Student Research	3 rd semester (summer)
	IRB Application Submitted	3 rd semester (summer) <i>Note: May extend to 4th semester with permission of your mentor</i>
	IRB Approval Granted	4 th semester (fall)
	Copy of IRB Approval Submitted to Director of Student Research	4 th semester (fall)
	Student Receives Approval from the Department to Begin Research (This could occur as early as 2 nd semester). Student then <u>begins</u> collecting data.	4 th semester (fall)
	First Defense: Question and Methodology (location TBA)	4 th semester (fall)
	Complete Powerchart Training (if applicable)	4 th semester (fall)
	Finish Data Collection & Complete Paper	5 th semester (spring)
	Submitted Draft of Research Paper to Major Advisor and Additional Faculty Member for Review	5 th semester (spring)
	Submitted Corrected Research Paper to Major Advisor and Additional Faculty Member for Review	5 th semester (spring)
	Second Defense: Formal Presentation	5 th semester (spring)
	Final Research Paper Submitted to Major Research Advisor for Grading	5 th semester (spring)
	Submit Completed and Signed Project Research Completion Form and Final Research Paper to the Director of Graduate Student Research	5 th semester (spring, at least 2 weeks before graduation)
	Submit Signed Final Report for IRB Termination or Student Completion Form to IRB with Copy to Director of Graduate Student Research	5 th semester (spring, at least 2 weeks before graduation)
	Received Copy of Project Research Completion Form with the Director of Graduate Student Research and Chair's Signature Indicating Approval of Research Requirements for the MHS	5 th semester (spring, 1 week before graduation)

MAJOR ADVISOR AND FACULTY RESEARCH MEMBER(S)

Name of Student: _____

Program: _____

The Major Research Advisor must be a faculty member within the Department of UHP MHS-CLS Program. The Major Research Advisor will provide oversight of the student's graduate project, which includes assisting the student in selecting and pursuing the research topic, oversight in the preparation of the project, oversight of the student application for review of the research proposal by the Institutional Review Board, oversight through the completion of the project and oversight of the writing and presentation of the project. The Major Research Advisor will also provide critical review and grading of the project and will ensure that the student has completed all required paperwork outlined in the Research Project Process.

The Faculty Research Member, chosen upon advisement from the Major Research Advisor, will serve with the Major Research Advisor in oversight and grading of the graduate project. This member may be faculty with the Department of UHP, within the College of Allied Health Sciences, or within the University or the member may be a clinical faculty member at one of the many clinical affiliates used for training the department's graduate students.

If you are willing to serve in the indicated position as described above, please sign below.

Major Research Advisor Name	Signature	Date
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Research Faculty Name	Signature	Date
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Director of Graduate Student Research	Signature	Date
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Department Chair Name	Signature	Date
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RESEARCH PROJECT PROPOSAL FORM

Name of Student: _____

Program: _____ Degree Sought: _____

Proposed Title: _____

If you approve the attached Research Proposal, print and sign your name in the space indicated. The Major Research Advisor must indicate his/her approval before the student may give this proposal to the other research faculty members. Once the signature is obtained from the Research Faculty Member, the Research Proposal and this form will be given to the Director of Graduate Student Research for review

Major Research Advisor Name	Signature	Date
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Research Faculty Name	Signature	Date
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Director of Graduate Student Research Name	Signature	Date
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Department Chair Name	Signature	Date
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With the final signature from the Chair, the original form should be placed in the student folder, copies will be given to the student, Major Research Advisor, and to the Chair. When the student receives the copy of this form, with all required signatures, and the IRB approval of the research, then the research and collection of data can begin.

RESEARCH PROJECT COMPLETION FORM

Name of Student: _____

Program: _____ Degree Sought: _____

Proposed Title: _____

After reviewing the attached Final Research Paper, you agree that the student has completed all of the research requirements for the MHS-CLS degree. If so, please print and sign your name in the space indicated. The Major Research Advisor must indicate his/her approval before the student may give this proposal to the other research faculty member. Once the signature is obtained from the Research Faculty Member, the Final Research Paper and this form will be given to the Director of the Graduate Student Research for review.

Major Research Advisor Name	Signature	Date
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Research Faculty Name	Signature	Date
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Director of Graduate Student Research	Signature	Date
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Department Chair Name	Signature	Date
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With the final signature from the Chair, the original form and final research paper should be placed in the student folder.

PROJECT RESEARCH COMPLETION FORM (page 2)

For graduation, the student's file must contain the following:

1. Completed and Signed Project Research Proposal Form
2. Research Proposal
3. Signed IRB Approval Form
4. Completed and Signed Project Research Completion Form
5. Final Research Paper
6. Copy of the signed Final Report for IRB Termination or Student Completion Form.

When the student receives the copy of this form, with all required signatures, then the student has completed all the Departmental Research Requirements.