

TABLE OF CONTENTS

Introduction.....	3
Acceptable Master’s Paper Projects.....	4
Timing.....	4
The Master’s Paper Committee	5
PSYC 530 – Master’s Paper – The Course.....	7
Publication Credit	8
Making Changes to Your Master’s Paper Committee	9
Important Deadlines.....	10
Academic Integrity.....	11
Steps in the Master’s Paper Process.....	13
Identifying and Refining a Topic.....	13
What projects are acceptable?.....	14
Conducting a Comprehensive Literature Review	14
Additional Steps for Empirical Master’s Projects	15
Writing the Proposal	16
Proposal Meeting	17
Completing the Master’s Paper.....	18
Empirical Projects/IRB	18
Empirical Projects/Data	19
Writing the Master’s Paper	19
Quality of Writing.....	20
Consulting Resources.....	21
Learning Center	21
Statistics and Research Consultants.....	21
Oral Defense	22
Preparing to Graduate	22
Technical Requirements.....	24
Paper	25
Headings	25
Type Specifications.....	25
Margins	26
Page Numbers	26
Figures, Tables, and Footnotes	27
Front Matter	27

Title Page	27
Permission-to-Copy Page.....	28
Signatory Page	28
Abstract	29
Table of Contents.....	29
List of Figures, List of Tables, etc	30
Acknowledgements.....	30
Back Matter.....	30
APPENDIX A. Master’s Paper Committee Form	31
APPENDIX B. Steps in the Master’s Paper Process	33
APPENDIX C. Selected Resources for Psychology Master’s Papers	37
APPENDIX D. Title Page.....	39
APPENDIX E. Permission-to-Copy Page	41
APPENDIX F. Signatory Page	43
APPENDIX G. Table of Contents	45
APPENDIX H. List of Tables.....	47

Prepared by M. Becker, September 2004; Revised by B.A. Bremer, September 2005, August 2006, July 2007; Revised by M. Becker, September 2008; Revised by S. Poyrazli and M. Becker, September 2011; Revised by M. Harrison, March 2014

This publication is for informational purposes only and is not binding on The Pennsylvania State University.

Introduction

All Psychology Master's students are required to write and successfully defend a Master's Paper as a capstone experience. The successful completion of a Master's Paper requires that you delineate a question of a psychological nature, develop a framework that will allow you to investigate this issue, present your findings in the appropriate written format, and orally defend your paper. Regardless of the specific nature of your project, in every Master's Paper, a student must demonstrate knowledge of the research process--relevant theory, literature, methodology, and writing--at a level appropriate for a Master's-level professional.

Below you will find a complete list of the steps and procedures involved in planning, writing, and defending a Master's Paper. **You are expected to be familiar with the content of this Psychology Programs Master's Paper Manual and that you will take the initiative to identify and adhere to the deadlines discussed below.** Your Master's Paper chair will help guide you through the process, and the other members of your committee are also available for consultation. However, the ultimate responsibility for the successful completion of your Master's Paper lies with **you**.

Types of Projects Acceptable for the Master's Paper

For your Master's Project, you will work with faculty to identify a psychological topic of interest to you and create and execute a research project that addresses the phenomenon. The following are among the types of projects that are acceptable for the Master's Paper:

- an empirical study (e.g., an experiment, a survey)
- a systematic literature review (consult *Psychological Bulletin* for examples)
- a theoretical or conceptual analysis (consult *Psychological Bulletin* for examples)
- a secondary analysis of existing data
- the development or validation of a new test or measures
- a program evaluation
- a meta-analysis
- a well-designed qualitative study

Specific steps in the Master's Paper process are described in Appendix B.

Timing

Most students greatly underestimate the time needed to complete their Master's Papers. You should not wait until the end of your coursework to begin your planning. Rather, your Master's Paper project should be in ongoing development from early in the program. Although this will vary from one project to the next, you should plan on *at least* 1 year from the time you begin seriously working on identifying a topic to the completion of the final paper. However, there are many factors (e.g., the complexity of the project, your statistical and writing skills, problems with obtaining participants) that can influence this timeframe upwards or downwards.

Again, completing a Master's Paper takes much longer than most students realize. Ask any graduate student who is now working on his or her Master's Project! **You will find that you will be ahead of the game if you plan ahead and start early.**

The Master's Paper Committee

A critical aspect of the Master's Paper process is the selection of your Master's Paper committee, which must consist of a Master's Paper chair and two other members. This committee will decide whether or not to approve your Master's Paper at both the proposal and the oral defense stages.

Your Master's Paper chair must be a member of the Penn State Harrisburg graduate psychology faculty and should be someone with whom you can work well and who has interest and expertise in your topic area. This individual has the primary responsibility for supervising your Master's Paper activities, and the two of you will work closely from the start to the finish of your paper. Among other things, your Master's Paper chair will help you to develop your ideas, guide you through the methodology and data analysis process, help prepare you for your proposal and final oral defense meetings, and facilitate your proposal and final oral defense meetings.

Please note that a Master's Paper chair is distinct from an academic adviser. Although you may choose to include your academic adviser on your Master's Paper committee, you are not obligated to do so, nor are you obligated to appoint your academic adviser as chair of your Master's Paper committee if this individual is in fact included on the committee.

The second member of your committee must also belong to the Penn State Harrisburg psychology graduate faculty. The third committee member can be another Penn State Harrisburg psychology faculty member, a Penn State Harrisburg psychology adjunct, a faculty member from another discipline and/or institution, or a nonacademic professional in a psychology-related field (e.g., an individual from an institution where you intend to collect data) who holds a doctoral-level degree. If you choose somebody from outside of the Penn State Harrisburg psychology

faculty, make sure that you first get the approval of your Master's Paper chair.

Protocol requires that you make in-person requests to the three individuals whom you would like to have on your committee. Be prepared to give an overview of your ideas and your timeline to each person. It is likely that these individuals will raise questions and point out potential problems to help you further refine your topic.

The earlier you select and begin working with your Master's Paper chair, the better. Ideally, you should choose this person in the idea stage of your Master's Project. The other committee members need not be selected at the same time as your adviser. In fact, your chair might suggest other members for your committee. Your chair can also help to develop and refine your topic. For instance, it might be possible to carve out a piece of this person's ongoing research program for your own research project.

Once you have a fairly good idea of your topic, obtain a *Master's Paper Committee Form* (see the example in Appendix A) from the psychology staff assistant or from the psychology program web site, complete the required information (including the proposed title of your paper and a description of your project), and obtain signatures from your committee members to verify their willingness to work with you. Return the original to the psychology staff assistant, retain a copy for yourself, and distribute a copy to each member of your committee.

It is important for you to be aware that faculty are not under contract to the University from mid May through mid August. Faculty have professional or personal obligations that make them unavailable to work with you, attend proposal meetings, or attend oral final defense meetings during summer and winter breaks, holidays, and faculty sabbaticals. Moreover, it is likely that faculty will not be available for proposal or final oral defense meetings during Final Exam week, as they have existing scholastic commitments. Be sure to discuss your timeline

with prospective committee members early in the process.

Please also remember that you must give your chair and your **committee at least two weeks** to read **each** draft of your submitted, written work, so plan accordingly. As an example, it is unlikely you could submit your project proposal with less than two weeks of classes remaining and still defend your proposal that same semester.

The information below speaks to the next step of the process, which is registering for PSYC 530, the Master's Paper course.

PSYC 530 – Master's Paper -- The Course

You and your Master's Paper chair will decide on a research topic for your Paper. However, to help you understand and navigate the Master's Paper process, beginning in Fall 2014, Master's students must take PSYC 530 as a structured course with regularly scheduled meetings. Prerequisites for doing so are completion of Research Methods (PSYC 520) and Statistics (PSYC 521) and permission of the program. In consultation with the instructor of record of PSYC 530, each student will set project goals for that semester, including but not limited to: topic development; literature searching; project proposal creation in whole or in part; data collection; and final paper creation in whole or in part. Stated another way, your chair and you will decide on your topic, and you will work together on content, but the instructor of record for PSYC 530 will help you with idea development, scientific writing, and creating a cogent argument. Note that either your PSYC 530 professor or Master's Paper chair may instruct you to seek the help of the Learning Center for grammar, organization, APA style, and other technical aspects of writing.

Note that if you are "stuck" and need guidance identifying a research topic, with permission of the instructor, you can register for PSYC 530. The instructor of record will help

you explore options. In rare cases, this can be done before you identify your chair and committee. That is, you may select your committee based on expertise *after* you identified your topic area with the PSYC 530 instructor.

Upon registering for PSYC 530, you have one academic year to complete your Master's Paper. For example, if you register in Spring 2015 for PSYC 530, you have until the end of Fall 2015 to complete your work. If you do not complete your work in that year, you will have to register for the course again.

When you register for PSYC 530 in a given semester, you must make satisfactory progress on your Master's Project. This progress will be assessed by your chair and the instructor of record for PSYC 530. If your progress is satisfactory, but you are not yet ready to orally defend your final project, you will be assigned a grade of R. If your performance is unsatisfactory in areas such as (but not limited to) topic development, writing, argument, literature searching, literature comprehension, and oral presentation, you may be assigned a grade of D or F. Note that violations of academic integrity will likely result in sanctions including but not limited to a failing grade for the Master's Paper. Please see your Applied Clinical Psychology or Applied Psychological Research Program Manual with respect to the retention consequences of receiving a D or F grade.

When you successfully defend your final Master's Paper, your chair, in conjunction with your instructor of record for PSYC 530, may assign you a final, passing letter grade.

Publication Credit

It is very important that you and all members of your Master's Paper committee have a clear understanding regarding publication and other intellectual property rights issues. Thus, make sure that you approach your committee members as early as feasible to discuss the scope of

their involvement, their authorship expectations, and related concerns. As appropriate, this dialogue should continue throughout the research and publication process. It is particularly important that you and your Master's Paper adviser have clear agreement on these issues.

Membership on a Master's Paper committee does not in and of itself entitle a committee member for authorship on any resulting publications or presentations. Rather, the committee member must make a significant contribution to the project.

Typically, a student should be listed as principal author on any multi-authored article or presentation that is substantially based on the student's Master's Paper if the student developed the topic, collected data independently, did not require extensive supervision while completing the Master's Paper, and was primarily in charge of submitting and revising the manuscript for publication/presentation. However, if the Master's Paper is directly based on a committee member's work or existing data set or otherwise lacks this degree of independence, the student might not warrant first authorship.

Making Changes to Your Master's Paper Committee

If, for some reason, you contemplate a change to your Master's Paper committee after it has been constituted, you should discuss your intentions with your Master's Paper adviser (or another committee member if the Master's Paper adviser is the person whom you would like to replace). Among other factors, it is important that intellectual property rights issues be considered, as a committee member who has made a significant scientific contribution to the Master's Project has a vested interest in it, including, but not limited to, publication credit.

If you still want to make the change, the next step is to speak with the committee member in question. If this individual has no intellectual property rights or other concerns and agrees to be dropped from your committee, provide a written statement to this effect to your Master's

Paper adviser, who will place the original in your file and distribute copies to the program coordinator and all members of the original committee. Make sure that this statement is signed by both you and the committee member in question.

If the committee member in question is reluctant about being dropped from your committee due to intellectual property rights or other concerns, you should arrange a meeting between that person, yourself, and your Master's Paper adviser (or another committee member if the Master's Paper adviser is the person who you would like to replace) with the goal of reaching a resolution that is acceptable to all parties. This resolution should address authorship for subsequent presentations/publications and other relevant issues and must be documented in writing. The written statement should be given to your Master's Paper adviser, who will place the original in your file and distribute copies to the program coordinator and all members of the original committee. Make sure that this statement is signed by both you and the committee member in question.

If a satisfactory agreement cannot be reached, your Master's Paper adviser will seek advice from the Graduate School. No work on the original or a new Master's Project can occur until all intellectual property rights and other relevant issues are resolved and the appropriate documentation has been filed.

Important Deadlines

There are three important University deadlines that you must meet if you wish to graduate in a timely manner. First, your oral defense must occur on or before the Certification for Completion of Master's Paper deadline for the semester in which you wish to graduate. This deadline, which can be found on the academic calendar at www.hbg.psu.edu, typically occurs around the first week of October for the fall semester, around the first week of March for the

spring semester, and around the first week of June for the summer sessions.

Second, if you think that you might in fact be able to defend your Master's Paper by the Certification for Completion of Master's Paper deadline, you must file your intent to graduate through eLion before that semester's filing deadline. Doing so will ensure that your name appears on that semester's graduation list. The intent to graduate deadline, which can be found on the academic calendar, typically occurs approximately 2 weeks into each semester.

Third, you must complete **all** of the requirements discussed in this manual prior to the day the final graduation check sheets arrive, which is typically about 2 weeks after the certification date for the semester.

All of these deadlines are set by the University and cannot be extended. **If you miss any of them, you will be unable to graduate until the next semester.** Thus, it is very important that you check the academic calendar prior to the beginning of the semester in which you graduate for the specific dates.

The Importance of Academic Integrity

Adhering to Penn State's Academic Integrity standards is critical in the Master's Paper process. To this end, we underscore our Academic Integrity stance for you. We expect students of Penn State Harrisburg Psychology's graduate programs to conduct themselves professionally, responsibly, and ethically in their classwork, research, and field experiences. To uphold this standard, **we will not tolerate academic dishonesty.** For breeches of academic integrity in any manner (e.g., cheating, assisting another's cheating, plagiarizing), of any magnitude (short assignment or Master's Paper), we will file academic dishonesty charges with the College Academic Integrity Committee. We will push for the maximum penalty possible, including program dismissal. Even if you are not dismissed, be aware that a violation can result in a

permanent indication of academic dishonesty (an XF grade, or “Failure, Academic Dishonesty”) on your academic transcript.

In the event you are dismissed, there is an extremely low likelihood that you would, at any future time, be readmitted to your former program. There is also an extremely low likelihood that you would ever be admitted to another Psychology program at Penn State Harrisburg (i.e., Applied Clinical Psychology, Applied Psychological Research, Applied Behavior Analysis, or Community Psychology and Social Change).

As a Penn State University student, it is your responsibility to know what constitutes violating academic integrity. Refer to University guidelines for more information:

<http://www.psu.edu/oue/aappm/G-9.html>

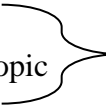
Advice: Just don't. You will be caught. Don't throw your career away by plagiarizing in the capstone experience of your Master's program.

Steps in the Master's Paper Process

The major steps in the Master's Paper process are discussed at length below and are summarized in Appendix B. You will find it useful to refer to this list often and to check off each step as you complete it.

For ease of presentation, here is a brief synopsis:

- Identify a topic
- Conduct a literature review to understand the topic
- Design your study
- Write your proposal
- Defend your proposal
- Conduct your study
- Write your Master's Paper
- Orally defend your Master's Paper



Select your chair and committee and register for PSYC 530 at this point. If you find yourself stuck on topic identification, your 530 instructor can provide guidance.

Identifying and Refining a Topic

You should begin to think about some possible ideas for your Master's Project early in the program. It will be helpful at this stage to share your thoughts with psychology faculty who are knowledgeable about your topic area. If you are unsure of who these individuals are, your academic adviser can help guide you. These preliminary discussions can be very helpful in identifying the individuals who will ultimately constitute your Master's Paper committee.

Once you have a working idea for your Master's Paper, you will need to further refine it. The identification and refinement of your research topic can take weeks or months and will require familiarity with the relevant literature and ongoing discussion with your committee members, particularly your adviser. It will be very helpful if you can find a review article or a meta-analysis that summarizes the current state of research in your chosen area, but this is not always possible.

I've Identified a Topic in Which I Am Interested...So What Projects Are Acceptable?

Once you identify a topic of interested to you, you will design a research project to address the psychological phenomenon. As stated above, there are many acceptable project types, such as an empirical study (collecting data), a systematic literature review (conducted with predefined search terms and parameters), or a meta-analysis.

Whereas we do not insist that your final project be published in a scientific journal, this capstone research project must make a unique contribution to science. As an example, you are not advancing scientific knowledge if you author a literature review of a topic that was already recently reviewed and published in a scientific journal. Your chair and instructor of record for PSYC 530 can help you delineate what is acceptable and unacceptable research for the purposes of the Master's Paper.

Project Background: Conducting a Comprehensive Literature Review

Regardless of the nature of your project, it will be necessary for you to conduct a comprehensive review of the relevant literature. Starting this process early will assure that you have time to identify all available references and to receive any requested interlibrary loan material. Summer is a good time to search and read the literature, but don't neglect this process during the academic year.

Most Master's Papers reference at least 25 sources; the actual number will depend on the nature of your Master's Project, your topic, and the requirements of your adviser. It is imperative that you familiarize yourself with the most current literature (within the past 5 or so years), but older articles may also provide valuable information. Avoid using textbooks, "pop psychology" books, or non-scientific websites (e.g., Wikis) as references. Stick with articles from reputable, professional, peer-reviewed journals or with books/book chapters written by credible experts in

the field.

The ideas for your Master's Paper must be based on science (e.g., *a priori* hypotheses). Nonreferenced, unsupported ideas are not acceptable. See Appendix C for a list of selected resources for psychology Master's Papers.

As you proceed with your literature review, you should continually refine your ideas until you have a clear sense of how you want to proceed with your project and writing. Feel free to consult with your Master's Paper chair throughout this process.

Additional Steps for Empirical Master's Projects

Because most Master's Projects involve some sort of data collection, it is important to discuss some of the issues involved in empirical Master's Papers. Among the things that you will have to do before you are ready to begin data collection is to narrow your focus until you have a research question that is both meaningful and practical (e.g., in terms of time constraints, cost, and gaining access to participants). Then, develop your methodology, and determine your analyses. Other types of projects have their own unique demands.

It is very important to have a tightly designed, methodologically sound study. Among the decisions that you will have to make are what research technique you will use and the nature of your research design, variables, measures, sample, and procedures. If you intend to conduct your study off campus, you will also have to identify an appropriate research site(s). You must obtain written permission any organization or institution from which you wish to recruit participants.

Many existing psychological tests and questionnaires have copyright restrictions, which means that you cannot simply make copies for your own use; you will need to contact the outlet that supplies the instrument and pay a fee. However, many other measures are under public domain. The best and fastest way to obtain an instrument is to personally contact the author for

information. Most researchers will happily forward their materials (along with instructions and coding manuals) to you for free.

Ethical concerns should be fully considered throughout the decision-making process and, as discussed on pp. 12 to 13, your project must meet all requirements of the American Psychological Association's 2002 *Ethical Principles of Psychologists and Code of Conduct*, the Penn State Social Science Institutional Review Board, and the review boards of any cooperating institutions.

Writing the Proposal

When you are sufficiently familiar with the literature and have carefully considered the other important aspects of your Master's Project, you will be ready to prepare a written Master's Project proposal. For empirical projects, the Master's Paper proposal typically consists of a title page, a literature review/delineation of your research questions (this will serve as the basis for the Introduction section of your Master's Paper), a description of your research design and methodology (this will serve as the basis for the Method section of your Master's Paper), an indication of how you intend to analyze your data (this will ultimately be incorporated into the Results section of your Master's Paper but can be included as a subsection of your Method section for purpose of your proposal), and a reference list.

The nature of your written proposal will differ from this if your project is nonempirical in nature. Because the specific organization of your proposal will depend on the type of project that you undertake, it is not possible to delineate all possible formats here. Your Master's Paper chair will help you to develop a format that is appropriate for your specific project.

It will probably be necessary for you to prepare several drafts of your Master's Project proposal before it is approved by your Master's Paper chair. It is only after you have received

such approval that you will be permitted to proceed with your proposal meeting.

Proposal Meeting

The proposal meeting is the first of the two formal meetings with your committee that are required as part of the Master's Paper process. When your Master's Paper chair informs you that you are ready to schedule your proposal meeting, arrange a date and time with your committee members (proposal meetings generally require a maximum of 1½ hours) and ask the psychology staff assistant to reserve a room. At least 2 weeks prior to the meeting, you must distribute your written Master's Project proposal to each member of your committee. Send out a confirmation of the meeting date, time, and room a week in advance.

At the proposal meeting, we require you to summarize the rationale and the other important aspects of your proposed Master's Project (e.g., your background, research design, methodology, and analyses). We strongly suggest you use PowerPoint, Prezi, or some other tool to make your presentation professional. We also require you to answer any questions that your committee raises. Thus, make sure that you are prepared! Do NOT read from your proposal document word-for-word, and do not read from your presentation slides word-for-word. Present key words on your slides and elaborate for your committee. Of course, you may use notes or cue cards, but the point of the proposal meeting is to convince your committee that your topic idea is viable and that you possess the topic knowledge and research skills to carry out the project. Simply reading from your paper or slides overrun with information does not convince your committee that you are ready for the challenges of the project.

All proposals are subject to unanimous committee approval. At the end of your proposal meeting, your Master's Paper adviser will let you know the committee's decision along with any changes that you must incorporate into your project or your proposal. If there are only minor

issues, your committee may grant approval to continue to the next step, contingent on your making the requested revisions. If there are more serious issues, you will have to rewrite the problematic portions of your proposal and to share the revised version with your Master's Paper adviser or the entire committee before you will be allowed to proceed.

Completing the Master's Paper

The next step in the Master's Paper process requires that you address the issues that you raise in your proposal. The specific nature of these tasks will, of course, differ depending on the nature of your Master's Project. For instance, if you are conducting an empirical study, you will have to collect, analyze, and interpret your data. All work must meet the standards presented in the American Psychological Association's 2002 *Ethical Principles of Psychologists and Code of Conduct* and, if relevant, undergo review by the Penn State Office for Research Protections (ORP). As you continue to progress with your project, you should continue to expand and refine your literature review.

Addition steps for empirical Master's Projects.

Institutional Review Board approval. All Master's Projects that entail the collection of data or a secondary analysis of existing data must be approved by the Penn State University Office of Research Protection (ORP) Institutional Review Board (IRB). If you are conducting your project in collaboration with the Hershey Medical Center, it might also be necessary to have your proposal reviewed there for approval. Consult with your adviser and the ORP to make this determination.

You can find all necessary IRB information and forms on the ORP website, www.research.psu.edu/orp/areas/humans. As explained on this site, you must pass all required courses offered through the Collaborative Institutional Training Initiative (CITI) program (CITI

Training) before you are allowed to make an IRB submission or begin data collection. For more information, see the Penn State Scholarship and Research Integrity (SARI) website:

<http://www.research.psu.edu/training/sari>

Your Master's Project must be approved by the Penn State IRB even if you intend to conduct your study off campus. Your project must also meet the review requirements of any collaborating organizations or institutions. **No** research can begin until all required research review committees have approved the project in writing.

Because the specifics of your research design and methodology might be modified as a result of your proposal meeting, you should typically not submit your Master's Project for IRB review until your Master's Paper committee approves it at your proposal meeting. However, if circumstances warrant, it may be possible to apply for IRB approval beforehand with the permission of your Master's Paper adviser. When this is done, the IRB must be notified of any changes that result from the proposal meeting.

Collecting and analyzing the data. It is critical that you carry out your Master's Project exactly the way that it was approved. Even seemingly benign changes can have disastrous effects on the integrity of your study. Therefore, it is critical that your Master's Paper adviser preapprove any changes that you are contemplating. Unauthorized modifications can jeopardize your entire Master's Paper and can also have serious legal consequences.

Once you have collected your data and coded, entered, and analyzed it (typically using SPSS), you can write up your Results section of your Master's Paper.

Writing the Master's Paper

You should be working on writing and revising your Master's Paper throughout the above steps with the goal of preparing a final document that reflects your best possible work.

The organization of your paper will differ depending on the nature of your Master's Project. In all cases, though, your written proposal should serve as your starting point.

Papers for empirical projects will begin with an Introduction section that reviews the relevant literature and delineates your research questions, followed by a Method section that describes your research design and your methodology; a Results section that presents your analyses and findings; and a Discussion section that provides a nonstatistical summary of your results, draws conclusions based on these results, links your findings to previous research and to relevant theoretical constructs, addresses any limitations of your study, and outlines avenues for future research.

The organization of your Master's Paper will differ from this if your project is nonempirical in nature. Because the specific organization of your paper will depend on the type of project that you undertake, it is not possible to delineate all possible formats here. Your Master's Paper chair will help you to develop a format that is appropriate for your specific project.

You will prepare your final paper to the best of your ability, and then submit it to your Master's Paper chair. Your chair will review your work and provide you with feedback and guidance. Be aware that it will likely be necessary for you to prepare several (or many) drafts of your Master's Paper before it is approved by your Master's Paper chair. The actual number of drafts will depend on how thorough a job you do on each one and how responsive you are to your chair's feedback. It is only after you have received such approval that you will be permitted to submit your Paper to your other committee members and schedule your oral defense.

Quality of Writing. Your committee will expect your Master's Paper to reflect professional-quality, APA-style, scientific writing, and you will not be able to proceed to your

proposal meeting or to your oral defense until your Master's Paper adviser is satisfied with the quality of your written work. All writing must follow the format and style of the *Publication Manual of the American Psychological Association* (6th ed.).

Additional Information: Consulting Resources

The Russell E. Horn Sr. Learning Center. Professional writing tutoring to support your work on your Master's Paper is available through the Learning Center, which is located in Olmsted W-117. Among the things that the Learning Center can help you with are the development of your ideas, objective feedback during the drafting process or on completed drafts, and APA format. Students may schedule up to 2 hours of appointment time per week. Call 717-948-6604 or visit <https://harrisburg.psu.edu/learning-center> for further information.

Statistics and research consultants. The use of paid statistics or research consultants is not allowed, and your Master's Paper committee reserves the right to reject your Master's Paper and/or Master's Project if there is reason to believe that you have paid for statistical or research consulting. However, students can take advantage of the free consultation services provided by the Statistical Consulting Center located at the University Park campus. Each Penn State graduate student can take advantage of two short-term consultations at no charge, one at the design stage and one at the analysis stage of Master's Paper research. Each consultation consists of two meetings with a statistics graduate student enrolled in the Statistical Consulting Center's Consulting Practicum course. At the completion of the second meeting, you will receive a written recommendation report. Further information is available at (814)863-0281 or on the following website http://scc.stat.psu.edu/short_term.html . Email inquiries can be directed to scc@stat.psu.edu.

Oral Defense

The oral defense is the second of the two formal meetings with your committee that are required as part of the Master's Paper process. When your Master's Paper chair informs you that you are ready to schedule your oral defense (which, per p. 9, must occur on or before the Certification for Completion of Master's Paper deadline for the semester in which you wish to graduate), arrange a date and time with your committee members (oral defenses generally require a maximum of 1½ hours) and ask the psychology staff assistant to reserve a room and any audio-visual equipment that you will need. At least 2 weeks prior to the oral defense, you must distribute a *completed* copy of your Master's Paper to each member of your committee. (In other words, what you send to your committee is your best, complete, final version of your Paper.) Send out a confirmation of the meeting date, time, and room a week in advance.

Oral defenses are open to anybody who chooses to attend. During your defense you will be asked to summarize all facets of your Master's Project and to justify your rationale, research design, methodology, analyses, and conclusions. You will also be asked to address any other questions that arise. Last, you will be asked to leave the room while your committee decides to approve your Master's Paper as is, approve it conditional on making changes, or not approve it. If your paper is approved, at the discretion of your committee you will either be assigned a letter grade or retain the R grade that you were assigned when you registered for PSYC 530. If the committee requires you to make changes (which is likely), these must be completed within 2 weeks of the defense.

Preparing to Graduate

Once you have successfully defended your Master's Paper and completed all other degree requirements, your Master's Paper adviser will inform the psychology staff assistant and the

program coordinator, who will complete the final paperwork necessary to certify you for graduation (assuming that you have filed your intent to graduate, as discussed on p. 10).

However, there are still several things that you must do prior to the day the final graduation check sheets arrive. As noted above, this is typically about 2 weeks after the certification date for the semester.

Specifically, you must: (a) Revise your Master's Paper as requested by your committee and have the revised version approved by your Master's Paper adviser and, if requested, by other committee members. (b) Prepare and have all committee members sign two copies of an appropriately formatted signatory page to formalize the approval of your Master's Paper (see p. 24). (c) Pay a \$25 binding fee to the Bursar's Office. (d) Provide the receipt for the \$25 binding fee and two properly formatted copies of the approved paper to the psychology staff assistant. The psychology staff assistant will forward these copies to the graduate coordinator, who will review your paper for any format errors. If the program coordinator detects any problems, he/she will communicate this to your Master's Paper adviser, who will work with you to make any necessary changes. Once the program coordinator is satisfied that your paper meets all University requirements, he/she will sign off on it and return it to the psychology staff assistant, who will forward it to the library for binding. (e) If you have not yet heard from the staff assistant or your Master's Paper adviser, check with the staff assistant 2 weeks after you have submitted your paper to make sure that it was approved by the graduate coordinator. **If you do not accomplish these tasks prior to the day the final graduation check sheets arrive, your certification to graduate will be rescinded and you will be removed from the graduation list.**

If you do not graduate because you did not complete the above requirements prior to the

psychology staff assistant submitting the graduation list, you must complete an *Application for Permission to Resume Graduate Studies* form within the first week of the next semester in order to be eligible for graduation that semester. You must also complete the above tasks no later than the certification date for that semester, or sooner if an earlier deadline is stipulated by your Master's Paper committee.

Following successful completion of the above and all other degree requirements, your program coordinator will, upon request, provide you with a letter verifying the same. Ordinarily, this letter is satisfactory proof of completion of the degree for employment purposes.

Technical Requirements

There are strict requirements for the layout of the Master's Paper. Generally speaking, both the format and style must conform to that outlined in the *APA Manual*. However, as discussed below, there are several instances where the University requires adherence to the Penn State *Thesis Guide* instead. This document can be obtained free of charge by calling the Thesis Office at (814) 865-5448 or at www.gradsch.psu.edu/enroll/thesis.html. Although there are also other differences between the format described in the *APA Manual* and that described in the *Thesis Guide*, Master's Papers are only required to follow those *Thesis Guide* requirements that are explicitly stated in the following sections.

Other exceptions to the usual APA style are predicted on the fact that the Master's Paper is a final document rather than a manuscript intended for typesetting. These modifications, along with those dictated by the *Thesis Guide*, are specified below. Much of this material was adopted or modified from the *2011-2012 Thesis Guide*.

You are responsible for making sure that your paper is correctly formatted, and you will not be able to progress to your proposal meeting, oral defense, or graduation until your Master's

Paper adviser verifies that your written work meets all applicable format and style requirements. Thus, it is in your best interest to set up your Master's Paper using the correct format from the beginning.

Copies of all Master's Papers are kept in the library, and it might be helpful for you to look at some of these. Keep in mind, though, that formatting requirements change from time to time and that there is variation in the quality of students' work.

Paper

The final copies of the Master's Paper must be submitted on uniform white paper of at least 25% cotton content.

Headings

Headings and subheadings should be used to help organize the paper. See Sections 3.02 and 3.03 of the APA Manual for further discussion of this issue and for examples. At a minimum, empirical Master's Papers should contain the four major sections outlined in Sections 2.05 to 2.08 of the APA Manual: Introduction, Method, Results, and Discussion. Appropriate headings and subheadings should also be used in other types of Master's Papers.

Type Specifications

Text should typically be double-spaced. Single-spacing is allowed in certain limited cases: the table of contents, block quotations, tables (including table titles and headings), figure captions, and footnotes. It is also permitted within items in the list of tables, list of figures, reference list, and notes (but double-spacing is required *between* each item in the preceding). APA style also allows judicious triple- or quadruple-spacing after major section headings, before major subheadings, before footnotes, and before and after tables in the text to improve appearance and readability.

Begin each major section on a new page. Do the same with each element of the front matter (list of tables, acknowledgments, etc.), the reference section, and each appendix. See the *APA Manual* for typeface requirements.

Margins

The left margin (binding side) of every page must be 1.5 inches. The other three sides must have a margin of 1 inch (more than this is acceptable, but less could require the reformatting of the entire paper.) Everything on the page (page number, footnotes, etc.) must meet these requirements. These stringent margin requirements are necessary because all page edges are trimmed during the binding process.

Page Numbers

With the following exceptions, every page in the paper, including those with tables and figures, must be numbered in the upper right-hand corner and counted. Use lower case Roman numerals for the front matter and Arabic numbers for the text. **The text (or body) of the Master's Paper must begin on page 1.** Do not number a page with "a" or "b" or skip numbers; do not embellish page numbers with punctuation (dashes, periods, etc.); and do not type the word "page" before the page numbers. Running headers and page headers are not permitted.

All pages in the front matter, starting with the abstract, should be numbered with lower case Roman numerals. Neither the title page nor the signatory page show a page number, although they are actually pages i and ii, respectively. The permission-to-copy page is neither numbered nor counted and is required only in the official copies of the Master's Paper. You may omit the permission page from your personal copies. The abstract page (page iii) is the first page that shows a number.

Figures, Tables, and Footnotes

Figures, tables, and footnotes should follow APA style, with the exception that they should be placed within the text where the results are discussed rather than being placed at the end of the paper. Footnotes to the text should be typed at the bottom of the relevant page. For further details, please refer to the APA Publication Manual.

Front Matter

The term “front matter” refers to all the pages in front of the main text of the Master’s Paper. Front matter pages are numbered with lower case Roman numerals. In order, these pages are:

- ◆ title page (counted but not numbered)
- ◆ permission-to-copy page (neither counted nor numbered)
- ◆ signatory page (counted but not numbered)
- ◆ abstract (page iii)
- ◆ table of contents
- ◆ list of figures, abbreviations, maps, tables or multimedia items (each a separate list)
- ◆ acknowledgments

The first five of these pages are required in all Master’s Papers, and the last two must also be included under the conditions outlined below.

Title Page

The title page must appear **exactly** as shown in the example in Appendix D of this manual. Type the title page of the Master’s Paper using capital letters throughout. If it occupies more than one line, double space between lines. Use word substitutes for formulas, symbols,

superscripts, Greek letters, and other nonalphabetical symbols in the title of the paper.

Use your legal name as it appears on your records in the Registrar's Office. Your name must appear in exactly the same form each time it is used in the Master's Paper. On the copyright line, use either the word "Copyright" or the symbol © (not both), followed by the year and your name (note: you own the copyright on your work whether you choose to include this notice or not).

On the date line, indicate the month and year of the degree conferral, **not** the date of the defense or the date you submit your paper. Degrees are conferred only in May, August, and December.

Permission-to-Copy-Page

The permission-to-copy page is placed immediately after the title page and must follow the format in Appendix E. It should not be counted or numbered, but it must be signed.

Signatory Page

The final copy of the Master's Paper must include a signatory page. The signatures on this page indicate that the committee members have approved the Master's Paper as a complete and final work requiring no further alteration (see the example in Appendix F of this manual).

In addition to being signed by the committee members and adviser, the signatory page must be signed by the program coordinator. If one of the signatories has a dual role (e.g., Master's Paper adviser and coordinator), list both roles under the professorial title (do not list the same person more than once on the signatory page).

Be sure that all signatories are identified by their correct professorial titles, which can be obtained from the psychology staff assistant. Do not use such designations as "Ph.D." or "Dr." on the signatory page. Administrative titles should not be included, with the exception of your

program coordinator. Only one administrative title should be used, as only one person is signing on behalf of the major department. If a signatory is not available to sign at the appropriate time, a proxy signature is allowed so that the paper will qualify for final submission. The program coordinator may sign the name of the absent signatory and initial it beneath, thus indicating knowledge of the approval.

Type the page as shown in Appendix F. Space the names proportionally on the page and include the professorial titles and any other pertinent designations as indicated above. No specific color of ink is required for signatures.

Abstract

Every Master's Paper must contain an abstract. An abstract is a concise summary of the Master's Paper, intended to inform prospective readers about its content. It usually includes a brief description of the research, the procedures, the results, and the conclusions. An abstract should not include internal headings, parenthetical citations of items listed in the reference section, diagrams, or other illustrations.

The abstract follows the signatory page and has the heading Abstract at the top. It always begins on page iii.

Table of Contents

The table of contents is essentially a topic outline of the Master's Paper. It is compiled by listing the headings in the Master's Paper and should be single-spaced. You may choose to include first-level headings, first- and second-levels, or all levels. Keep in mind that there is no index in a Master's Paper, and thus a fairly detailed table of contents can serve as a useful guide for the reader. The table of contents must appear immediately after the abstract and should not list the abstract or the table of contents itself. It should include everything else that appears **after**

the table of contents, including the list of figures, tables, etc. (see the example in Appendix G).

Be sure that the headings listed in the table of contents match word-for-word the headings in the text. Double check to be sure that correct page numbers are shown. In listing appendices, indicate the title of each appendix.

List of Figures, List of Tables, etc.

Include a list of figures and a list of tables if you have one or more items in these categories. Use a separate page for each list. Show the figure or table number, the caption or title exactly as it appears in the text, and the page number of every figure and table in the Master's Paper. All entries should be single-spaced with double-spacing between entries. A sample list of tables can be found in Appendix H. Except for the heading (which should be LIST OF FIGURES), this is also the format for a list of figures.

Acknowledgments

An acknowledgments page is required if the author has received permission to use copyrighted material or must acknowledge grant sources. Otherwise, this page is optional. If included, it is used to express the author's professional and personal indebtedness.

Back Matter

The back matter of the Master's Paper will include a reference list and, if relevant, one or more appendices.

APPENDIX A

Master's Paper Committee Form

Master's Paper Committee Form

Applied Clinical Psychology

Applied Psychological Research

Name: _____

Proposed title: _____

Description: _____

Signature of Committee Chair

Date

Signature of Committee Member

Date

Signature of Committee Member

Date

APPENDIX B

Steps in the Master's Paper Process

STEPS IN THE MASTER'S PAPER PROCESS

Note: In addition to the steps below, you must defend your Master's Paper on or before the Certification for Completion of Master's Paper deadline for the semester in which you wish to graduate and you must file your intent to graduate before that semester's filing deadline.

- _____ **Allow plenty of time!** Begin serious work on your Master's Paper project at least 1 year before your desired graduation date.
- _____ Select a Master's Paper adviser and two other committee members.
- _____ Complete a *Master's Paper Committee Form* and obtain signatures from your prospective committee members. Return the original to the psychology staff assistant, retain a copy for yourself, and distribute a copy to each member of your committee.
- _____ Identify and refine a Master's Paper topic.
- _____ Register for PSYC 530 (Consult with your Master's Paper adviser to determine exactly when you should do this.)
- _____ Conduct a comprehensive literature review and refine your ideas until you have a clear sense of how you want to proceed with your Master's Project and the accompanying Master's Paper.
- _____ If your Master's Project is empirical in nature, narrow your focus until you have a research question that is both meaningful and practical, develop your methodology, and determine your analyses.
- _____ Prepare a written Master's Project proposal.
- _____ Obtain the permission of your Master's Paper adviser to schedule your proposal meeting.
- _____ Schedule your proposal meeting (i.e., arrange a date and time for your proposal meeting with your committee members).
- _____ Have the psychology staff assistant reserve a room for your proposal meeting.
- _____ At least 2 weeks prior to the proposal meeting, distribute your written Master's Project proposal to each member of your committee.
- _____ Send out a confirmation of the meeting date, time, and room a week in advance.
- _____ Prepare for your proposal meeting.
- _____ Proposal meeting.

- ___ Obtain committee approval for your proposal.
- ___ If your Master's Project is empirical in nature, complete the following steps:
 - ___ Obtain approval from the Penn State IRB and the research review committees of any collaborating organizations or institutions. (If circumstances warrant, it may be possible to apply for IRB approval before your proposal meeting with the permission of your Master's Paper adviser.)
 - ___ Collect your data.
 - ___ Code your data and enter it into the computer.
 - ___ Conduct your analyses.
 - ___ Finish writing your Master's Paper.
 - ___ Obtain the permission of your Master's Paper adviser to schedule your oral defense.
 - ___ Schedule your oral defense (i.e., arrange a date and time for your proposal meeting with your committee members).
 - ___ Have the psychology staff assistant reserve a room for your oral defense.
 - ___ At least 2 weeks prior to the oral defense, distribute a *completed* copy of your Master's Paper to each member of your committee.
 - ___ Send out a confirmation of the meeting date, time, and room a week in advance.
 - ___ Prepare for your oral defense.
 - ___ Oral defense.
- ___ Complete the following prior to the day the final graduation check sheets arrive (which is typically about 2 weeks after the certification date for the semester):
 - ___ Revise your Master's Paper as requested by your committee and have the revised version approved by your Master's Paper adviser and, if requested, by other committee members.
 - ___ Prepare and have all committee members sign two copies of a properly formatted signatory page.
 - ___ Pay a \$25 binding fee to the Bursar's Office.
 - ___ Provide the receipt for the \$25 binding fee and two properly formatted copies of

the approved paper to the psychology staff assistant. The psychology staff assistant will forward these copies to the graduate coordinator, who will review your paper for any format errors. If the program coordinator detects any problems, he/she will communicate this to your Master's Paper adviser, who will work with you to make any necessary changes. Once the program coordinator is satisfied that your paper meets all University requirements, he/she will sign off on it and

return it to the psychology staff assistant, who will forward it to the library for binding.

_____ If you have not yet heard from the staff assistant or your Master's Paper adviser, check with the staff assistant 2 weeks after you have submitted your paper to make sure that it was approved by the graduate coordinator.

_____ Go celebrate!

APPENDIX C

Selected Resources for Psychology Master's Papers

Penn State Harrisburg Library owns thousands of books, journals, and other materials for Psychology students. It also serves as a gateway to resources at other libraries, both at Penn State and throughout the country. One of the most helpful resources is the Behavioral Sciences and Education Librarian, Bernadette Lear (bal19@psu.edu; 717/948-6360), a full-time faculty member who can guide you through the literature search. She can advise you on appropriate databases and information resources for your topic, and coach you in effective search strategies. Feel free to contact her for assistance or to make a research appointment.

Through the library's online catalog (the "CAT"), you can search for materials at the Harrisburg library, University Park, and all other Penn State libraries. Penn State also provides access to *PsycInfo*, *Dissertation Abstracts*, and more than 400 other literature databases. Depending on your research topic, you may want to use databases in other disciplines, such as *PubMed/Medline* (medicine), *MIT CogNet* (brain science), *ERIC* (education), and more.

The Penn State Library Information Access System ("LIAS") utilizes a variety of technologies to deliver information to your desktop and to send books and other print items to Harrisburg for you to borrow. Through cooperative agreements with other universities in Pennsylvania and across the United States, the library can obtain copies of nearly any book or journal article you will ever need--almost always for free.

Penn State's vast electronic resources may seem to obviate the need of visiting the library, or using information in paper form. However, we are working in a "hybrid" intellectual environment where both electronic and print information are essential for a full understanding of the field. Many quality journal articles, and the vast majority of books, are not available online. Be sure to allow yourself adequate time for trying various search strategies, consulting with the Librarian and your thesis advisors, and ordering materials from other libraries.

APPENDIX D

Title Page

The Pennsylvania State University
The Graduate School
School of Behavioral Sciences and Education

TITLE GOES HERE IN THIS FORMAT

Master's Paper

by

name of student

©year name of student (separated by one space)

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Master of Arts

month year (separated by one space)

APPENDIX E

Permission-to-Copy Page

I grant the Pennsylvania State University the non-exclusive right to use this work for the University's own purposes and to make single copies of the work available to the public on a not-for-profit basis if copies are not otherwise available.

signature here

typed name here

APPENDIX F
Signatory Page

We approve the Master's Paper of (your name).

Date of Signature

Name of committee chair
Academic title of committee chair
Master's Paper Adviser

Name of committee member
Title of committee member

Name of committee member
Title of committee member

Name of your program coordinator
(if not included above)
Academic title of program coordinator
Coordinator, name of your program

APPENDIX G

Table of Contents

Table of Contents

LIST OF FIGURES.....	v
LIST OF TABLES.....	vi
ACKNOWLEDGEMENTS.....	vii
INTRODUCTION.....	1
METHOD.....	19
RESULTS.....	23
DISCUSSION.....	28
REFERENCES.....	37
Appendix A. TITLE OF APPENDIX.....	57
Appendix B. TITLE OF APPENDIX.....	61

APPENDIX H

List of Tables

LIST OF TABLES

1. Title of the First Table Per the Guidelines in the *APA Manual*,
with the Exception that the Title Should Not be Italicized.....12
2. Title of the Second Table Per the Guidelines in the *APA Manual*,
with the Exception that the Title Should Not be Italicized.....18
3. Title of the Third Table Per the Guidelines in the *APA Manual*,
with the Exception that the Title Should Not be Italicized.....24