Introduction and Background

The Honors Program consists of two components: (1) the Curriculum Program, which is a two-year program of course work normally completed during the freshman and sophomore years, and (2) The Research Honors Program (resulting in “Honors in a Discipline”), which involves the writing of a research honors thesis in the senior year. Note that the Research Honors Program can be done with or without the Curriculum Honors Program. Successful completion of either component is recognized on the student’s transcript. Students who successfully complete both components and maintain the requisite grade point average are awarded College Honors. (Consult the appropriate section of the Marietta College Catalog.)

Overview of the Research Honors Program

The Research Honors Program represents a special institutional recognition (Honors in a Discipline) of superior scholarship awarded to seniors who successfully complete and defend a research honors thesis written in their major or minor field of study.

The research and writing involved in a thesis should represent a level of intellectual accomplishment and scholarship clearly above that expected of other graduates in the discipline.

Eligibility

To be eligible for the Research Honors Program, prospective candidates must:

• be a junior or senior (students are encouraged to develop and defend their proposal as juniors),
• have a cumulative grade point average of at least 3.300 at Marietta College,
• have a cumulative grade point average of at least 3.300 in courses taken in the discipline of the thesis (i.e., those on the degree audit sheet offered in satisfaction of the major or minor),
• secure the assistance of a faculty member who will serve as their thesis advisor and chair of their thesis committee, and
• meet any additional requirements of the department / program in which the research is done.
Note: The requirements for the grade point averages must be met at the time of the formal proposal to the student's thesis committee and at graduation, in order to receive the honors.

Administration of the Research Honors Program
Dr. Alicia Doerflinger, Director, Honors Program (ad001@marietta.edu)

Preliminary Process
Preferably by the end of the second semester of the junior year, but no later than the first semester of the senior year, candidates should have:
1) formulated a working idea of a project to serve as the basis for the thesis;
2) found a faculty member in their major or minor discipline who is willing to serve as their thesis advisor and chair of their thesis committee (The role of the thesis advisor is to supervise and evaluate the student's work, not to provide the ideas or momentum required for successful completion of the thesis);
3) planned to register for between 1 to 3 hours of credit in DEPT 493: Honors Research ("DEPT" is the code for the sponsoring department. The thesis advisor may recommend changes in the total number of credit hours or the semester in which the student registers for those credits depending upon the nature and timing of the project).

The Thesis Committee
Each candidate's individual thesis committee consists of the candidate's thesis advisor, one additional faculty member selected by the candidate (optional), and one member of the Honors and Investigative Studies Committee.

The principal duties of the thesis committee include the following:

1) Conduct a formal session during which the candidate presents and defends his or her thesis proposal, and to accept or reject that proposal (This session typically takes place prior to the end of the semester preceding the one in which the candidate expects to complete the project. Candidates should be prepared to accept constructive criticism, including a request to re-submit the proposal, if necessary);

2) Following review of a candidate's proposal, send to the Honors and Investigative Studies Committee a letter recommending whether the proposal should be accepted or rejected. The letter should indicate for the record that the thesis committee thinks (a) the project is feasible in light of the time and resources available to the student, and (b) the anticipated level of intellectual activity and scholarship required to complete the thesis exceeds that expected of other graduates in the discipline;

3) Approve the style manual appropriate for the candidate's field of study;

4) Serve as the hearing body for the final presentation of the completed thesis;

5) Approve or disapprove the final thesis (It is the responsibility of the thesis advisor to assign a final grade in the course associated with the thesis project);

6) Notify the Honors Director of any student qualifying for Research Honors (resulting in Honors in a Discipline), as well as the status of all students who submitted a preliminary
written proposal;

7) Work with the Honors Director to produce the final thesis to be uploaded to OhioLINK.

**The Proposal**

A candidate is required to submit an acceptable formal proposal for his or her project. The final proposal should be substantive: it should demonstrate that the candidate and advisor have given serious thought to the project and that the candidate has begun the process of researching the subject. The recommended deadlines specified later in this document also provide for a substantial preliminary draft of the proposal so that the thesis committee can recommend ways in which the candidate can improve the final version of the proposal.

Normally the proposal is prepared and submitted for approval no later than during the fall semester of the senior year, with the thesis being completed during the spring semester shortly before graduation. It is possible, however, for the proposal to be submitted in the spring semester and the thesis to be completed during the following academic year. This option can accommodate either students who expect to graduate in December or students who wish to get an early start on their projects by obtaining approval of the proposal during the spring semester of their junior year.

The proposal should include each of the following headings, as appropriate for the discipline:

- A **working title** which is related to the thesis statement.
- A **thesis statement** that is a clear and specific statement of what the candidate intends to argue, demonstrate, or investigate. The thesis committee needs assurance that the thesis is one which the candidate is capable of presenting and defending on the basis of the knowledge, expertise, and resources which he or she possesses at the time of the proposal and will gain during the research. The topic should not be so narrow that writing about it will be a trivial exercise, nor so broad that a candidate will be able to offer only superficial generalities.
- An **overview** that describes the general nature and scope of the project or research and serves as the basis for the thesis.
- A **rationale** for undertaking the project.
- A description of the method, procedures, and materials the candidate expects to use. The method of supporting and defending the thesis should be rigorous and must involve significant research of the relevant literature. Qualitative research is valid, but should follow professionally accepted procedures. Selected anecdotes, interviews, case studies, etc. are useful for illustrating one's thesis and enlivening the writing, but generally should not be the only, or even principal, means used to support the thesis. (An exception might be if one were doing groundbreaking work that relied upon extensive qualitative research.)
- A list of **working references**. Candidates should demonstrate that they have done some basic library work and that they will be able to locate the resources necessary to support and defend their theses. The proposal should include a preliminary list of working references that are relevant, substantive, and, if applicable, recent. It would be helpful if the proposal were to cite a few key references in a way which indicates that the candidate has read them, at least in a preliminary fashion.
- A **tentative timeline** for work on the project, including (1) beginning and ending dates, (2) goals for any significant intermediate dates (such as target dates for completion of the research, or writing of successive drafts) and (3) arrangements for meeting with the thesis advisor. Candidates should demonstrate that they have a realistic idea of the time that will be
required to complete their projects and to write their theses, and that they have budgeted the necessary time over an extended period.

The Thesis


The culmination of the research honors project is a formal thesis. As a guide, the length of a thesis typically falls within the range of 30 to 60 pages—or more if required to adequately defend the thesis statement. Margins should be 1 inch and a 12 point font should be used. The research and writing involved in this thesis should represent a level of intellectual accomplishment and scholarship clearly above that expected of other graduates in the discipline. While it is common for the research honors project to be an enhanced version of a project that will satisfy the requirements for a senior capstone course, the criteria for an acceptable honors project must be clearly more rigorous than the criteria for a typical senior capstone project in a given department. To this end, the Honors and Investigative Studies Committee requires that the finished thesis meet rigorous standards with respect to depth and value of critical thinking demonstrated, organization of material, clarity and maturity of expression, and physical format.

Before their final presentations to the thesis committee, candidates—in consultation with their thesis advisors—should expect that they will be required to write and revise, resolving difficulties of organization, sentence structure, and spelling, among the more obvious issues. In this context, candidates are reminded of the availability of the Marietta College Writing Center as a valuable resource.

Candidates should check with their thesis advisors concerning the use of style manuals written and designed specifically for their fields of study. A competent scholarly journal in the candidate's field of study can serve as a model for the format of footnotes and the bibliography. If a general-purpose style manual is sufficient, the Writing Center can recommend a suitable one. At the time the candidates present their final proposals to their thesis committees, they should indicate the style manual they will be using to write the thesis and to format references and citations.

The thesis must include the following:
- title page (sample attached),
- approval page (sample attached),
- acknowledgments page,
- table of contents,
- abstract,
- introduction,
- body of the paper, including research methodologies or experimental procedures used (where appropriate), discussion of issues, observations, and conclusions,
- appendices (if needed),
- bibliographies and/or references cited.

After the successful defense of the thesis, a signed copy of the approval page must be submitted to the director of the Honors Program. The student will then receive instructions on how to submit an electronic copy of the thesis, which will be published on OhioLink. The electronic
version of the thesis that is submitted to OhioLink should have the names of the thesis committee typed into the approval page.

**Alternative Model for a Thesis**

In some disciplines, including, but not necessarily limited to, art, music, or theater, for example, the thesis may be based on a significant culminating educational experience which involves either *applied work or an artistic creation*, such as an art show, a music composition, or the writing of a play.

In situations such as these, the work submitted to the thesis committee for evaluation should include a self-standing *explanatory text* that is approved by the thesis committee. The explanatory text enables future readers to appreciate and understand the nature and purpose of the project. The material submitted should also include a record of the project that will be associated with the text. For example, an art show could be preserved in the form of digital photographs, or a music performance could be documented by audio or video recordings.

In the case of a project based on some form of artistic work (e.g., visual arts, music, or creative writing), the explanatory text could include, for example, some mix of the following: (1) an articulation of the historical, cultural, and aesthetic contexts in which the thesis project is undertaken, (2) an explanation of how the thesis project responds to its historical, cultural, and aesthetic contexts, (3) evidence that the student has achieved an advanced understanding of any medium (e.g., materials or technologies) required to execute the project, and (4) a demonstration of the student's critical thinking about the project, which would entail both a critical analysis of relevant work in the same field and a critical assessment of how effectively the thesis project itself achieved its objective.

**Library Privileges for Research Honors Candidates**

Students accepted in the Marietta College Research Honors Program are encouraged to make an appointment with a reference librarian to discuss resources available for their project. The librarian will provide the candidate with one-on-one assistance to find the best research tools available, to develop good search strategies, and to select the best databases for the candidate’s project. In addition to the resources available in the library, the library’s membership in OhioLINK makes the collections of 85 colleges and universities in the State of Ohio accessible to all Marietta College students. Numerous electronic research databases and full-text resources are also available through OhioLINK membership.

Students in the Research Honors Program are permitted to check out books required for their Honors project for an extended loan period. Check with the College Librarian for details on current policies for Honors Program students.
Timetable and Deadlines

For the 2015/16 academic year (Fall/Spring) the Honors and Investigative Studies Committee has developed a procedure for submitting thesis project materials that provides candidates a sequenced set of intermediate deadlines leading to the final deadline. This provides the thesis committee with the opportunity to offer helpful feedback along the way.

1. Monday, August 31. Informational Meeting. The candidate should attend this informational session to have any questions answered. Students will receive this thesis guide and an intent form at the meeting.

2. Monday, September 7. The candidate should have submitted to Alicia Doerflinger (Mills Hall 405) a completed intent form, signed by the thesis advisor. By this date, Candidates, thesis advisors, and potential committee members should have downloaded this document from the Honors Program website. (Research Honors Program--Information for Prospective Candidates).

3. Monday, September 14. Candidates should have met with their advisors by this date to discuss a draft of the proposal. Advisors should provide substantive feedback to the candidate on that draft, along with suggestions for revision and/or further development.

4. Monday, September 21. After substantial consultation with the thesis advisor, candidates should have submitted to Alicia Doerflinger, by 5 pm, a thoughtful, detailed preliminary written proposal following the format described on page 3. Please submit the preliminary proposal as an e-mail attachment. In consultation with the thesis advisor, the Honors and Investigative Studies Committee (H&ISP) will review the proposal to ensure that it meets the criteria for a Research Honors project. If the committee, in consultation with the adviser, finds the preliminary proposal lacking in any regard, the candidate will be provided specific formative feedback. The Honors and Investigative Studies Committee will then select one of its members to serve on the candidate's thesis committee, in addition to the thesis adviser (and any other member the student has invited, although a third member is not required.)

5. Monday, September 28. By this date, the HISC, after consulting the thesis advisor, will have provided feedback on the proposal to the candidate. It is the candidate’s responsibility to continue to seek out sufficient formative feedback from his or her committee members in order to successfully develop and/or revise his or her proposal.

6. Monday, October 19. By this date, candidates should have submitted the final proposal to the advisor and thesis committee, according to the advisor’s directions. The candidate must also electronically submit the final proposal to Alicia Doerflinger by this date.

7. Monday, November 9. The candidate should give an oral summary of the final proposal before the thesis committee at a mutually agreeable time and place by November 9. The presentation should also include the anticipated timeline for the project. Following the presentation, members of the committee ask questions and offer suggestions. Soon after that meeting, if not immediately after, the thesis committee should meet to decide whether the proposal is (1) accepted, (2) rejected, or (3) conditionally accepted.

8. Friday, November 13. Thesis advisor’s letter of evaluation should be sent to Alicia Doerflinger (ad001@marietta.edu) with the following information: name of the candidate, name of the thesis advisor, name of the discipline, whether the discipline is the student's major or minor discipline and a title for the thesis by November 13. The letter should
indicate acceptance of the proposal if the thesis committee believes (1) the project is feasible in light of the time and resources available, and (2) the anticipated level of intellectual activity and scholarship required to complete the thesis exceeds that expected of other graduates in the discipline. If the thesis committee feels the proposal should be rejected, the letter should indicate the general reasons for the rejection.

9. **Friday, February 12.** The candidate should convene the thesis committee before February 12 to present a [progress report and detailed timeline] for completion of the project. **By February 12** the thesis advisor will send a written confirmation to Alicia Doerflinger that the meeting has taken place and whether the candidate is deemed to be making satisfactory progress.

10. **Thesis Defense.** At least one week prior to the final oral defense of the thesis, or earlier if specified by the thesis committee, candidates must provide each member of the thesis committee with a copy of the thesis so that they can read it before the thesis defense. The thesis defense should normally occur by **Friday, April 15.** This is to allow time for the candidate to make any changes that the thesis committee may require before the final copy of the thesis is submitted. Thesis committees may alter this timing at their discretion, subject to the absolute deadline stipulated in the next point. The thesis defense includes an oral presentation by the candidate to all members of the thesis committee followed by an opportunity for questions. This could occur in conjunction with an oral presentation in another forum, such as All Scholars Day (Wednesday April 13), or senior capstone. Following the defense, the thesis committee should inform the student whether the thesis is approved or not approved. In many cases, provisional approval is granted subject to specified corrections being made before submission of the final copy of the thesis. The thesis advisor must inform the director of the honors program, Alicia Doerflinger, of the outcome of the thesis defense.

Honors thesis candidates are expected to present a summary of their thesis project at All Scholars Day on April 13, 2013. If it is acceptable to their thesis committee this presentation may be considered part of the thesis defense.

11. **DEADLINE: 12:00 pm Friday, April 22.** [An electronic file] of the thesis and a paper copy of the approval page (see attached document) must be signed by the thesis advisor and all other members of the thesis committee and should be submitted to Alicia Doerflinger. The electronic file will be uploaded to OhioLink.
THE DECOMPOSITION OF $\beta$-BUTYLPHERACETATE
IN THE PRESENCE OF 4-VINYLCYCLOHEXENE

Imogen D. Grandeur

This thesis is submitted in partial fulfillment
of the requirements of the Research Honors Program
in the Department of Chemistry

Marietta College

Marietta, Ohio

April 13, 2016
This Research Honors thesis has been approved for
the Department of Chemistry and
the Honors and Investigative Studies Committee by

__________________________________

Faculty thesis advisor

Date

__________________________________

Thesis committee member

Date

__________________________________

Thesis committee member
(if applicable)

Date
Check List

_____ Find a faculty member to serve as your advisor.

_____ Read carefully through this document, Information for Prospective Candidates.

_____ Send the Intent Form to Alicia Doerflinger by 5:00pm on Monday, September 7.

_____ Find a faculty member to serve as a second reader (optional, but recommended).

_____ Meet with your advisor and discuss a draft of your proposal before September 18. Revise in light of your advisor’s feedback.

_____ Submit a draft of your proposal to your thesis committee and Alicia Doerflinger by 5:00pm on or before Monday September 21. Ask your advisor to sign the copy. Be sure to include all of the headings found on page 3 of this document.

_____ Plan to pre-register for 1 to 3 credit hours in DEPT 493: Honors Research in the semester in which you will complete the thesis (usually spring semester).

_____ Draft and submit a final proposal to your thesis committee and Alicia Doerflinger before Monday, October 19. The final proposal is a revision of the earlier draft that reflects the feedback offered by your thesis committee and the Honors and Investigative Studies Committee.

_____ Hold an oral summary of your final proposal with your thesis committee on or before Monday, November 9. Your thesis committee will either accept or reject your thesis after this meeting.

_____ Your thesis advisor must send Alicia Doerflinger a letter of evaluation by Friday, November 13. This letter indicates whether the proposal has been accepted or rejected.

_____ Meet your thesis committee to discuss progress/timelines before Friday, February 12.

_____ Your thesis advisor must send Alicia Doerflinger an email message by Friday, February 19, which reports the above meeting and your general progress.

_____ Submit a complete draft of your thesis to your committee at least one week before your defense. The thesis defense should occur on or before Friday, April 15.

_____ Your thesis advisor must inform Alicia Doerflinger soon after your defense whether your thesis committee has approved your thesis.

_____ Submit a paper copy of your signed thesis approval page and email an electronic file of your entire thesis to Alicia Doerflinger by 12:00 pm on Friday, April 22. You will be sent instructions on how to submit your thesis to OhioLink. Students are responsible for uploading the document and final approval will be electronically registered by Alicia Doerflinger.