

The Honors College at Eastern Michigan University

Senior Project Handbook 2023-2025

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The Eastern Michigan University Honors College provides the intimacy of a small, liberal arts education within the context of a large, comprehensive university. To this end, both educational and cultural experiences for EMÜ's intellectually talented and motivated students are provided through challenging Honors courses and extracurricular activities that encourage scholarly curiosity, leadership, civic engagement, and diversity. The Honors College offers undergraduate students opportunities for a wide range of experiences that aid in the development of their appreciation for creativity, the arts, sciences, critical issues facing contemporary society, and diversity among people and their cultures.

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I. INTRODUCTION TO THE SENIOR PROJECT

What is a Senior Honors Thesis/Creative Project?

The senior project is the most respected hallmark of an Honors degree and the final step in completing the requirements for graduation with Departmental or Highest Honors from the EMU Honors College. The senior project provides the opportunity for a student – in close consultation with an expert member of the faculty – to define and carry through a line of research or a creative enterprise appropriate to the conclusion of a serious and substantial undergraduate program of study.

The most common type of senior project is executed entirely as a written piece of work. Within the category of written projects, the most common type is an academic or scholarly work that reports the results of the student's original research. Writing a senior project is different from writing just another research paper, however. First, it is a more substantial piece of work, both in terms of effort and length. Second, writing the senior project involves a cycle of writing, receiving feedback, and rewriting. Students who write a senior project never turn in a single draft and have it approved by all who need to sign. Instead, they work as apprentices through the process of writing scholarly work and write multiple drafts. The ultimate goal is to do excellent work and write an excellent (and original) paper.

Third, the senior project presents ORIGINAL work. It tackles a problem or part of a problem that others have not yet addressed adequately or completely or it approaches the problem in a new way. Library research into what others have done is typically an essential first step, but a research-based senior project goes beyond this to include your own insights, ideas, and/or collection of data. What distinguishes a senior project from a term paper you might write for a regular, upper-level course is the necessity for you to go beyond what others have written and to think critically about the topic at hand, to bring your own ideas to bear on the topic, and/or to collect and report on new information that expands knowledge in your academic discipline. A senior project is not, however, a Master's thesis or a Ph.D. dissertation and should be, correspondingly, smaller in scope. The senior project is a substantial research (or creative) project that can be pursued successfully in two to three semesters as part of a normal undergraduate course load. We expect that the senior project will exemplify the highest undergraduate standard in its ideas, methodology, accuracy, clarity, reasoning, and presentation.

Examples of topics that have been addressed in EMU research-based senior projects include: (1) the effects of a workshop on defining consent on behaviors and attitudes related to sexual assault; (2) an analysis of female evangelicals' participation in the American Revolution; (3) a test of the hypothesis that mice treated with Triton X-100 experience an increase in FOS immunopositive cells after exposure to odors; (4) an analysis of the absorption and oxidation of carbon monoxide (CO) on a lattice Rh surface; and (5) an analysis of Michigan municipal governments' use of websites and social media.

The second type of senior project is primarily a CREATIVE work. For an English major, the senior project may involve writing a novella, play, or collection of short stories or poetry. An art major may paint or sculpt a series of original works. A music major may write a musical composition or perform works not part of the standard curriculum. Students in a variety of fields may produce a video or film, write curriculum or business plans, develop a website, or create an event or organization (e.g., a fund-raiser, a new non-profit, a music festival). While students in any major may undertake a creative senior project, certain academic fields lend themselves to creative projects: art, communication technology, dance, digital media, education, entertainment design, fashion marketing, interior design, journalism, public relations, simulation, animation, gaming, theater arts, and many fields of business. The senior project advisor, the Departmental Honors

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¹ Furthermore, at the undergraduate level, it is fine if the student finds no support for hypotheses they test in a Senior project.

Advisor (if the student is seeking Departmental Honors), and The Honors College judge whether the creative work deserves to be considered a capstone experience for the discipline.

Examples of creative Senior projects completed at EMU include: (1) creating lesson plans and a curriculum map for an instructional unit on the hero's journey in the book *The Hobbit;* (2) developing a set of lessons for the promotion of informational writing in math, science, and social studies in grades one through five; (3) writing a guide to prepare voice majors for the opera audition process; (4) performing a variety of pieces by two little-known, Spanish composers; (5) creating a new EMU music festival; (6) writing a play about the Sack of Rome; and (7) creating a public relations plan for a local nonprofit organization. *You are encouraged to think creatively and design a project that fits what YOU want to learn and accomplish!*

Although a creative project can form the basis of a senior project, the creative product is <u>not</u> the complete Senior project! A CREATIVE WORK MUST BE ACCOMPANIED BY A WRITTEN ANALYSIS! This written analysis should include: (1) a plan in which you explain what you chose to do, why you chose to do it, and what your personal and academic goals were in attempting the project; (2) the creative work itself or a brief, written description of the creative piece (if it is not in text form); and (3) a reflection section, in which you evaluate the outcome of the project, including whether you met the original goals of the project and what you would do differently (or the same) if you were to attempt the project again.

Most students employ an approach to the Senior project that is appropriate to their particular field of study. Students in the sciences most often do a project that involves laboratory research. Students in the humanities most often do library research, combined with critical analysis. Students in the social sciences most often conduct survey research, a laboratory study, a qualitative study, or content analysis. Students in the fine and performing arts typically produce a creative work. No particular approach is required. *You and your Senior project advisor determine the methods and approach to the project – with the approval of the Departmental Honors Advisor, if you are seeking Departmental Honors.*

It is difficult to anticipate all the variations of projects that qualify as a senior project. If a student and advisor are unsure whether the project is acceptable, they should contact the Dean or Associate Dean of the Honors College.

Whatever type of senior project you choose to complete, it is essential to select a topic that genuinely interests you. A task that is not engaging quickly becomes boring and onerous, an undertaking unpleasant for both you and your advisor – a task soon avoided and unlikely to be completed.

Students can learn more about what prior Honors students in their academic discipline have done by accessing completed senior projects by accessing the <u>EMU Library's Digital Commons</u> website or by visiting the bookshelves in the downstairs lounge area of The Honors College building.

As a student moves through Departmental Honors, it is imperative to please keep the following in mind:

- All students pursuing Departmental Honors must complete a Senior Honors Thesis/ Creative Project.
- Attendance at an Undergraduate Research Workshop is required before submitting the Senior Thesis/Creative Project proposal.
- It is recommended that you attend an Undergraduate Research Workshop no later than the first semester of your junior year.
- Regardless of the type of project, written components are required.

Some departments require completion of a specific Honors thesis seminar or a research or independent study

course; students must be sure to check with the Honors Departmental Advisor about requirements in their area.

The Senior Thesis/Creative Project may take various forms. In addition to a lengthy research paper, students may elect to do one of the following:

- a public performance
- a documented lab experiment
- a computer program, a work of art
- a complex mathematical proof
- a portfolio of original designs

Each of these requires sufficient prefatory materials to allow the reader to fully understand the context, connection to professional literature, and purpose of the project as well as a concluding reflection that describes the impact of the project on future work. Whatever form the project takes, it should be a demanding exercise (three hours of credit presupposes about 150 hours of work), and the result should demonstrate exceptional skill and understanding.

Why Complete a Senior Project?

For students who are intent on making the most of their Honors education, the senior project serves as an academic capstone experience. Working on a senior project offers the following benefits:

- 1) An opportunity to work one-on-one with a faculty mentor in your major (or minor) on a project that will enhance your research, creative, organizational, and writing skills.
- 2) Integration of knowledge in a project of your own choice.
- 3) Self-awareness, as you engage in an independent project that can help clarify your academic interests and career goals.
- 4) The reward of rising to a unique, intellectual challenge.
- 5) The opportunity to earn Departmental Honors or Highest Honors -- or both.
- 6) Special recognition on your official transcript and at the Honors Commencement ceremony.
- 7) Enhancement of your resume or CV that will lead to admission to post-graduate education programs and additional employment opportunities.
- 8) The satisfaction that comes from working through a project on your own.

Who Completes a Senior Project?

The most gifted and dedicated Honors scholars typically complete a senior project as do students who have always wanted to pursue their own ideas or who love learning. In addition, students who wish to get the most out of their education or who wish to personalize a component of their education will opt to complete a senior project. Students who are interested in attending graduate school, particularly to earn a PhD, should definitely complete a senior project.

Basic Requirements for Completing a Senior Project

Listed below you will find the essential steps involved in completing a senior project. Each of the essential elements listed here is described in greater detail later in this handbook.

1. You must have a project advisor.

If you plan to earn Departmental Honors, the project advisor must be an approved faculty member in the Department in which you are seeking Departmental Honors. The Departmental Honors Advisor can tell you which faculty are approved senior project advisors.

If you plan to earn Highest Honors, the project advisor may be any member of the EMU faculty who holds a terminal degree in their field (usually a PhD, although possibly an MD, JD, or MFA). Students who wish to work with someone from another institution who holds a terminal degree may seek approval from the Dean of The Honors College to work with that individual.

- 2. You must submit a senior project proposal to The Honors College <u>no later than the end of the semester prior to the semester in which you intend to graduate</u> (i.e., April 1 for Summer and Fall graduates and December 1 for Winter graduates).
- 3. <u>Before</u> the project proposal is submitted to The Honors College, the Senior Project Proposal form must be signed by the senior project advisor and the Departmental Honors Advisor for Departmental Honors or the senior project advisor and the Associate Dean of The Honors College for Highest Honors. You can find the Senior Project Proposal form on the Forms page of The Honors College website (under "Student Forms"). Your submission must include the form and a one-to two-page description of your intended project.
- 4. The completed and signed Senior project must be submitted to The Honors College by the 20th day of the month of graduation (December 20 for Fall graduates, April 20 for Winter graduates, and August 20 for Summer graduates). To ensure you can meet these final deadlines, you should check the list of preliminary deadlines of this Handbook.
- 5. The title page of the senior project must be signed by the senior project advisor, the Departmental Honors Advisor, and the Department Head for Departmental Honors OR the senior project advisor and the Associate Dean of The Honors College for Highest Honors. (Please see the Deadlines section of this handbook for additional details.)
- 6. Students completing a senior project are <u>expected</u> to present their work at the <u>EMU</u>
 <u>Undergraduate Symposium</u> or at a regional or national conference in their academic discipline.

 [Note: You should check with your Departmental Honors Advisor to see if your Department <u>REQUIRES</u> you to present your work at the Undergraduate Symposium or a similar venue.]
- 7. The senior project and the title page must follow format/style guidelines described in the <u>Manual of Style</u> section of this handbook.
- 8. Students should submit their title page to the Associate Dean of the Honors College for approval by the 1st day of the first full month in the semester in which they intend to graduate (i.e., October 1 in fall, February 1 in winter, and June 1 in summer) (See <u>Deadlines</u> below).

The Senior Project Handbook

The goal of this handbook is to provide you with helpful information and pointers that simplify, clarify, and demystify the process of completing a senior project. The answer to almost every question ever asked about a senior project can be found in this handbook. Read this information carefully as you begin the process of developing an idea for your senior project. Keep it handy between now and graduation. If you have a question about the senior project – how to earn credit for your research, what the deadlines are, what the senior project should look like, what you can do if something goes wrong – look back through this handbook. Chances are you will find the answer to your question! If your question is not answered in this handbook, please contact the Associate Dean of the Honors College.

This senior project handbook should also be helpful to your project advisor and the other individuals who are expect to read and approve your senior project (the Departmental Honors Advisor and the Department Head or School Director), as the handbook contains information about expectations not only for students, but also for project advisors and other readers.

After you notify The Honors College who your project advisor is, we will provide them and other relevant individuals with a link to the handbook. You may also share the link with your advisor.

II. GETTING STARTED

When Should I Start?

The sooner you start, the better off you are. In most cases, however, students are not ready to start their senior project until they have completed at least 60 hours or a handful of introductory courses in their academic discipline. Ideally, you should begin planning your senior project at least four semesters before graduation so you can begin work on your senior project two to three semesters before graduation. Students in the sciences and social sciences typically need to start earlier than students in the arts, business, education, and humanities, as they often have to master experimental techniques before they can begin their own project. If you wait to begin your senior project in your senior year, you risk delaying graduation if problems arise with the completion of your senior project.

Finding a Topic and Advisor

The biggest fear most students have when they consider completing a senior project is that they will be unable to find a topic. While finding a topic can be difficult, the more research you do and the more you talk to other students, faculty, and advisors, the more likely you are to find a topic that suits you. Keep in mind that *you do not have to develop the topic all on your own!* Working on a senior project is similar to finding a position as an apprentice. Faculty have a great deal more experience in developing new research ideas than students do. Selecting a topic and selecting a senior project advisor are inextricably linked. Some students identify a topic first and then use the topic to help guide them to an Advisor. Others identify an Advisor first – a faculty member with whom they have a good relationship – and then use that relationship to guide them to a topic.

Ideally, the topic will be something that already interests you – something you have learned about in a course, something you have read, or even a hobby. When you have an idea for a project that interests you,

then you should find an advisor with interest and expertise in that area. If you are not familiar with the specialties of faculty in your discipline, the Departmental Honors Advisor can help you identify a faculty member whose interests match or overlap with yours. While identifying a topic on your own is wonderful, you should be prepared for faculty members to tell you that your understanding of the field is naïve or that your proposed topic is too broad or unmanageable. You should also be prepared for a faculty member to tell you that your idea is interesting, but they cannot serve as the advisor because the project is not closely related to their own research specialty. When students develop a topic completely on their own, they may have difficulty finding a project advisor who is willing to work with them.

Not having a topic in mind does not mean that you cannot do a senior project. Students who do not have a topic in mind have one advantage: they will not have their ideas rejected. If you do not have a topic in mind, it can be useful to find an advisor first. You can approach faculty members whose course interests you and ask for assistance in developing a topic. Often, that faculty member will help develop a project that fits with their line of research. If you have a general subject area in mind (e.g., social psychology, physiology, modern literature, business ethics), you can ask the Departmental Honors Advisor to help you identify faculty members who have interests in that area. You can then approach those faculty members to ask for assistance in developing a topic.

Another good way to identify a potential senior project advisor is to make use of the EMU website. Faculty websites for most departments at EMU list faculty research interests (if you click on the faculty member's photo on the Department webpage). Even if you have no idea what specific subfield of your discipline interests you most, you can find out a lot about what topics might be of interest by reading about faculty members in your discipline.

In choosing an advisor, you should take into consideration both the faculty member's expertise in an area that interests you and the potential to develop a close working relationship with that faculty member. One of the most rewarding aspects of completing the senior project is developing a personal and intellectual relationship with the senior project advisor. Thus, you should consider professors whose classes you particularly enjoyed or a professor you have gotten to know during office hours or in other contexts outside the classroom. Even if that professor turns out not to be the right advisor because their research interests are not a good match, they can often help direct you to an appropriate advisor.

A senior project topic should be neither too broad nor too narrow. A topic that is too broad, such as "Juvenile Delinquency," is simply not manageable. What do you want to know about juvenile delinquency? Juvenile delinquency where or among whom? A topic that is too narrow, such as "Police Response to Juvenile Delinquency in Chelsea, Michigan: May 2017," may not yield enough data for a meaningful analysis. You need to work with your advisor to select a topic that will result in a thoughtful, credible, high-quality senior project within a time frame of one to three semesters.

It may take time for you to narrow the problem to feasible proportions. Keep in mind that this project will not be the last word on the topic. Either you or your advisor or others will follow up on the ideas addressed in the senior project. Most original senior project topics need to be scaled down before they become manageable; you can make adjustments at any point in the process. It is up to you, your senior project advisor, and the Departmental Honors Advisor (or Associate Dean, for Highest Honors) to set the boundaries for the project. You and your advisor will need to agree on everything from the number of books or articles to read, the number of study participants or observations, the expected length of the finished work, etc. You and your advisor may change these agreements as the project progresses, but it is helpful to begin by defining these items in advance.

As you explore options for senior project topics, keep in mind that the most important factor in completing a

senior project is your interest in the topic. You need to enjoy what you propose to study. You need to take ownership of the project. Nothing cripples progress more than working on a senior project that you do not find engaging. How do students get into that situation? Often by having a professor persuade them to do something that does not really interest them. "Dr. Smith, would you be an advisor on my Senior project? I want to write about why identical twins are different from each other." "Well, I don't know much about identical twins or behavioral genetics, and I'm busy with my study of children's understanding of televised material. How about helping me with my study?" The student signs on, having no knowledge of or interest in children's understanding of television. Where will this Senior project go? Probably nowhere unless the student quickly develops an interest in children's understanding of television. Thus, the Number 1 rule of senior projects is for you to pick a topic that interests you.

[Note: If you will work in a research lab, you should ask questions about when work needs to be completed. In some cases, you may be expected to show up to the lab on evenings or weekends. For example, if the lab runs experiments on the ninth day of a tadpole's life, you have to be available no matter when the tadpole reaches nine days old.]

Does My Senior Project Advisor Have to Be a Member of the EMU Faculty?

For Highest Honors, the senior project advisor does not have to be a member of the EMU faculty. For Departmental Honors, the Department determines whether the senior project advisor must be a member of the Department). Some EMU Honors students have completed their senior project with an advisor who was a member of the faculty at the University of Michigan. If a senior project advisor leaves EMU and takes a position at another college or university while the student is in the middle of the project, the student may continue to work with that faculty member – as long as the student's Department approves, if the student is seeking Departmental Honors. For Highest Honors, the only rule is that a senior project advisor who is not a member of the EMU faculty must hold a terminal degree in their field (e.g., a PhD, MD, JD, or MFA).

How Do I Approach a Potential Senior Project Advisor?

You should approach potential senior project advisors with as much confidence as you can muster and as much information as you can gather. How you approach a potential advisor may depend on how certain you are that the professor in question is the right advisor. If you are sure you want that faculty member to become your advisor, you can visit office hours or send an email. Introduce yourself as a member of The Honors College, explain that you want to complete a senior project in the faculty member's academic discipline, and ask what topic or topics they recommend. If you think you want that faculty member to become your advisor but are not certain what topic you wish to pursue, you can introduce yourself as a member of The Honors College, explain that you wish to complete a senior project, indicate that you would be interested in working with the faculty member, and ask if the faculty member has a project that you might be able to work on. Flattery can be useful (e.g., "I decided to approach you because I really enjoyed your Physiology class. I'm interested in research in physiology and know I would enjoy and benefit from the opportunity to work with you.").

When you approach a potential senior project advisor, be as prepared and informed as possible, both about the senior project experience and the potential advisor. You should appear organized, responsible, and thoughtful. Learn as much as possible beforehand about a potential advisor's research! Go to the library or look on the web and read a few of the potential advisor's most recent papers. Not only will you appear more knowledgeable, diligent, and professional if you have read some of the potential advisor's work, but reading the papers can help you determine if the work interests you. It can impress a potential advisor if you begin with something along the lines of, "I decided to approach you because I read your article The

Ironic Effects of Thought Suppression, and I was intrigued that research on thought suppression could help identify who is most at risk for depression."

Finding a senior project advisor may take time. You may need to approach several faculty members before finding a topic and an advisor that feel right.

Do I Have to Complete the Senior Project in My Major?

For Departmental Honors, you can complete the senior project in a major <u>or</u> a minor. Some Departments will also allow you to work with a faculty member in another related discipline – for example, a biology major with an advisor from the Department of Chemistry or a nursing major or a student in the combined occupational therapy program with an advisor from the School of Health Sciences. The selection of a project advisor is more flexible with Highest Honors, as students are not tied to a specific Department or discipline.

You should keep in mind, however, that faculty are more likely to agree to work with students who are pursuing a major in their own academic discipline. For example, students who are not English majors pursuing a concentration in creative writing may have difficulty finding a faculty member willing to supervise them through a project involving creative writing. Typically, a student needs to "speak" the language of the discipline to do work in that discipline.

Responsibilities Involved in the Senior Project Advisor/Student Relationship

A senior project advisor should be willing to meet with you on a regular basis. These meetings should begin as soon as your project advisor agrees to work with you and should continue at weekly or biweekly intervals until the senior project is complete. While the project advisor may set those meetings to occur less frequently than weekly or bi-weekly, you and the advisor should decide at the start how frequently you will meet. These meetings allow you to ask questions and seek advice and for the advisor to give advice, direction, and encouragement. A key mistake students make is not meeting often enough with their senior project advisor!! Regularly scheduled meetings help you meet deadlines!

The advisor should help you refine and focus your interests into a manageable project and should help you develop a strategy and a timetable for the work's successful completion. The advisor will read *multiple drafts* of the project proposal and the project and will provide detailed feedback on the drafts (as well as on other activities you engage in as part of your research). A senior project always goes through <u>multiple revisions</u>. Thus, advisors must have <u>ample</u> time to read/view and comment on each version/revision!! You are responsible for scheduling appointments with your advisor and have an obligation to show up for each appointment. Your advisor will most likely write letters of recommendation or serve as a reference for you in the future. The responsibility and dedication you demonstrate while working on your senior project are important factors in an advisor's willingness to serve as a reference or recommender.

In summary, the senior project advisor should be willing to:

- meet with you on a regular and frequent basis (ideally at least once every two to three weeks)
- help define an appropriate scope for the project
- set forth clear expectations for the length of the senior project (or the written portion of the senior project)
- read work in a timely fashion
- help identify the resources necessary to complete the project
- communicate with the Departmental Honors Advisor to ensure common understanding of

project length, criteria for assessment, and other conditions and assumptions involving the project.

In response, the student must be willing to:

- communicate with the senior project advisor on a regular and frequent basis (and not chronically cancel, arrive late, or miss appointments)
- take responsibility for arranging meetings
- meet the deadlines that the student and advisor set together (barring unforeseen circumstances)
- notify the advisor of problems that interfere with the ability to meet deadlines or attend appointments
- work in the lab when they have committed to do so.

Lab research (especially in STEM) often requires that a student becomes a dedicated member of a research TEAM, which means that students may sometimes be expected to help lab mates with their research and, in turn, may receive their help on their project.

Projects Involving Human Subjects

If the senior project involves human participants, the student has an additional, required step, as research involving human participants requires approval from the EMU Institutional Review Board (IRB). If your senior project advisor has already obtained approval from the IRB for the project, they should be able to submit a revision, adding you as an approved undergraduate researcher. If your senior project advisor has not yet obtained approval for the study, you will need to submit a proposal to the IRB. Human subjects cannot participate in any research activity until the project has IRB approval!

The process of obtaining IRB approval to conduct research involving human subjects can be time-consuming! Therefore, students conducting research with human subjects must plan ahead – especially if they plan to work with participants in protected classes, such as prisoners or children. Senior project advisors should be prepared to guide students through the process of obtaining IRB approval. IRB instructions can be found on the EMU's Research Compliance Office's website.

If you plan to film or photograph human subjects, you typically only need to obtain a video release from the individuals whose images will be captured in the project. If your senior project Advisor cannot provide a video release form, you should consult with the Associate Dean of The Honors College to obtain one.

III. THE MECHANICS OF COMPLETING A SENIOR PROJECT

The Senior Project Proposal

Once you determine what you will do for your senior project, you should submit a Senior Project Proposal to The Honors College Your submission should include the Senior Project Proposal Form and a one- to two-page description of the project you plan to undertake. The <u>Senior Project Proposal Form</u> can be found on the Forms page of the Honors College website.

The Senior Project Proposal Form requires TWO signatures in addition to your signature. Students seeking Departmental Honors (or Departmental Honors <u>AND</u> Highest Honors) must obtain the signature of the senior

project advisor <u>and</u> the signature of the Departmental Honors Advisor for the Department that will be granting Departmental Honors. Students seeking Highest Honors (without Departmental Honors) must obtain the signature of the senior project advisor <u>and</u> the signature of the Associate Dean of The Honors College. A <u>list of Departmental Honors Advisors</u> for each Department can be found on The Honors College website.

Once the Senior Project Proposal Form has all relevant signatures, you should submit the form and the written description of the proposed project to The Honors College at EMUHonors@emich.edu.

The senior project proposal must be submitted to The Honors College no later than the first day of the last month of the term prior to the term in which the student intends to graduate with Departmental or Highest Honors (i.e., August 1 for fall, December 1 for winter, and April 1 for summer). You are strongly encouraged to submit your senior project proposal well before this final deadline.

Obtaining Approval of the Completed Senior Project

A senior project is only considered "complete" once all individuals who need to sign off on the project indicate to the student that they are ready to approve the work in its current form. Students seeking Departmental Honors (or Departmental Honors <u>plus</u> Highest Honors) must have the approval of the senior project advisor, the Departmental Honors Advisor, and the Department Head or School Director. Students seeking Highest Honors (without Departmental Honors) must have the approval of the senior project advisor and the Associate Dean of The Honors College. The Dean of The Honors College signs off on all senior projects once the other required approvals are in place.

Beginning with the fall 2022 semester, students will no longer be required to have individuals who need to sign the senior project sign the title page of the senior project. All of those required to sign off on the project will be <u>listed</u> on the Title Page (see the <u>Title Page Template</u> of this handbook), but the faculty members and administrators will sign the Senior Project <u>Approval Form</u>, available on the Forms page of The Honors College website <u>Forms page</u>. The Senior Project Approval Form is a dynamic form that routes directly to all the individuals who need to sign once the student enters their names and email addresses into the form. The faculty and administrators who are required to sign the Approval Form must have a copy of the senior project and a chance to read it and provide feedback <u>before</u> they can be asked to sign.

Submitting the Completed Senior Project to The Honors College

When you complete the Senior project and submit the Senior Project Approval Form, you should email a Word version and a PDF version of your senior project to The Honors College at EMUHonors@emich.edu. The senior project should be accompanied by a signed Library Release form.

Whenever possible, The Honors College and the EMU Library store completed senior projects in EMU Digital Commons, an online archive on the EMU Library website, which makes undergraduate and graduate Honors senior projects (or Honors theses), Master's theses, and Ph.D. dissertations available on the web. Preserving completed senior projects on the web makes them accessible for reading and sharing among scholars across the globe. Sharing knowledge and information that arises from research and creative production is the ideal end product of the type of scholarly work students engage in when they embark on the process of producing a senior project. Many of the Honors senior projects available on the EMU Library's Digital Commons websites have been accessed and read upwards of 1000 times. Some works have been cited in subsequent research and, recently, a law firm cited a senior project in a case they worked on.

Students and senior project advisors have the choice, however, as to whether they wish the completed work to be stored in and made accessible through Digital Commons. Thus, completion of the Library Release

Form is essential for the work to be available in Digital Commons. Students should talk with their senior project advisor before signing the form and allowing their work to be published on the web, as some advisors may not want the work released yet, particularly if they plan to publish all or some of the work in a publication in the academic discipline. Students may choose to release the work immediately for access worldwide, restrict access to EMU Library and patrons for a period of time before worldwide release, secure the work entirely for a year, or not release the work at all. The Library Release form also asks the student to submit Keywords for topics associated with the project.

To summarize, the steps involved in completing a senior project for Departmental Honors are:

- 1. Rewrite the senior project until your senior project advisor, the Departmental Honors Advisor, and the Department Head agree the work is of high enough quality to justify the Departmental Honors designation.
- 2. Complete and submit the Senior Project Approval Form.
- 3. Email the senior project to The Honors College.
- 4. Fill out the Library Release form, sign, and email it to The Honors College (after discussing whether to permit release with your senior project advisor).

The steps involved in completing a senior project for Highest Honors are:

- 1. Rewrite the Senior project until your senior project advisor and the Associate Dean of the Honors College agree the work is of high enough quality to justify the Highest Honors designation.
- 2. Complete and submit the Senior Project Approval Form.
- 3. Email the senior project to The Honors College.
- 4. Fill out the Library Release form, sign, and email it to The Honors College (after discussing whether to permit release with your senior project advisor).

Senior Project Deadlines

The final deadline for submission of a completed, <u>SIGNED</u> Senior project is the 20th day of the month in which you plan to graduate – December 20th for Fall graduation, April 20th for Winter graduation, and August 20th for Summer graduation.

To ensure that you can meet this deadline for the completed, signed senior project, The Honors College has imposed *the following additional deadlines* that you must meet to ensure your timely graduation:

Deadlines for Students Graduating in Fall:

Complete Draft to Project Advisor

Revised Draft to Departmental Honors Advisor &

Department Head or School Director

November 15

December 1

Complete Project to Honors College December 20

Deadlines for Students Graduating in Winter:

Complete Draft to Project Advisor March 15
Revised Draft to Departmental Honors Advisor & April 1

Department Head or School Director

Complete Project to Honors College April 20

Deadlines for Students Graduating in Summer:

Complete Draft to Project Advisor
Revised Draft to Departmental Honors Advisor &
Department Head or School Director
Complete Project to Honors College

July 15 August 1

August 20

Failure to meet the preliminary deadlines may delay your graduation or impact your ability to graduate with Departmental and/or Highest Honors! The individuals who need to sign your senior project have no obligation to rush to read or approve your senior project if you do not meet the deadlines listed. The Honors College Advisory Committee (HCAC) selected these deadlines to provide faculty and administrators with adequate time to read, review, and provide feedback to students and to provide students with sufficient time to revise their senior project so that the final version meets the standards of the Department and/or The Honors College.

These deadlines protect students as well: If you can demonstrate that you met all the deadlines but a faculty member or administrator who is expected to review the project fails to provide feedback in a timely fashion, you can appeal to the Honors College to have your senior project accepted and approved without the signature of that individual.

Earning Course Credit (and Honors Course Credit) for Work on a Senior Project

Students who wish to graduate with Departmental or Highest Honors have the option of working on the project on their own time or earning course credit for some or all of the work they do on the project. Typically, students who opt to earn course credit for work on their senior project also earn Honors credit for that coursework through the completion of an Honors Contract. Whether you choose to earn credit for the work on your senior project may depend on whether you can apply the course credits to your major requirements or remaining elective hours. Students considering work on a senior project are encouraged to talk with an Honors advisor and/or a major advisor to determine whether they should register for an Independent Study or Directed Reading course in their academic discipline while working on their senior project.

Typically, the courses students register for while working on a Senior project are Independent Study courses, which are courses in the discipline numbered 497 (a 1-credit course), 498 (a 2-credit course), or 499 (a 3-credit course). For example, a psychology major might take PSY 497, PSY 498, PSY 499, or some combination of those courses while working on their senior project. Students may also work on a senior project as part of an Honors project for an Honors contract.

In most Departments, students register for an Independent Study or Directed Readings course by filling out a Departmental form. Your senior project advisor should be able to assist you in registering for the Independent Study course. In most cases, the student or faculty member turns in a form to the Department so the student can obtain a CRN and override for registration. You should consult with your senior project advisor if you wish to register for credit for your work on your senior project.

Students who wish to earn Honors credit for their work on a senior project must <u>also</u> submit an Honors contract for that Independent Study or Directed Reading (497, 498, or 499) course. The Honors Contract form and the deadlines for submitting an Honors Contract can be found on the <u>Forms page</u> of the Honors College website. If you submit an Honors Contract related to the completion of your senior project, "I will be working on my senior project in this course" is a sufficient description of the work to be done for the Honors Contract.

What Happens to My Grade for an Independent Study Course If I Begin but Do Not Complete the Senior Project?

Grading can become complicated when students who have registered for an Independent Study (or Directed Readings) course to work on the project make the decision not to complete their Senior project prior to graduation. Failure to complete the senior project automatically means, of course, that you will not graduate with Departmental or Highest Honors. In addition, students who enroll in an Independent Study course to complete their senior project and do not complete it typically do not receive a grade of "A," as that grade should be reserved for completion of the work the student committed to in registering for the Independent Study course. Ultimately, however, the faculty member who serves as the instructor of record on the Independent Study course – typically the senior project advisor – determines what grade the student should receive for the Independent Study course when the student does not complete the project. When a student decides not to complete a senior project for which they have enrolled in an Independent Study course, the student and advisor are encouraged to contact the Associate Dean or Dean of The Honors College.

IV. CONTENT OF THE SENIOR PROJECT PROPOSAL

Writing the Senior Project Proposal

Your senior project proposal serves multiple purposes. First, writing the proposal helps you organize your thoughts and determine exactly what you want to accomplish. While you work on your project, your proposal serves as a road map that helps keep you focused on your goals. Second, your proposal serves as a contract between you, your senior project advisor, and the Departmental Honors Advisor. It specifies what you need to accomplish to complete the project. Having all parties agree in advance on the nature of your project minimizes the chance of later misunderstandings.

If you plan to complete a research-based project, your proposal should explain why your project is worthwhile and what steps you will take to complete the project. How will the project add to the body of knowledge that already exists in your field of study? If you have a hypothesis you plan to test, how will you test it? The proposal outlines not only the specific questions you hope to answer (e.g., whether 9-year-old children are more aware of their mothers' than their fathers' emotions), but also the larger questions that your project addresses (e.g., how gender differences in emotional expression develop). The senior project proposal presents your case for your ideas and your argument (if you plan to make one).

If you propose a creative or problem-solving project, your proposal should explain how and why the endeavor is worthwhile for you to complete. It should delineate what the project will consist of (e.g., 6 poems and 4 short stories, a unit on cancer for use in an Honors biology course, a plan for developing a new nonprofit organization). If your product involves creating an artistic product, your proposal should also describe previous similar work you have produced or training you have in the area and explain how the proposed project extends that work along new lines. The project proposal should also place your proposed creative work in a larger context that is defined by the creative works of other individuals in your field. How will your work relate to the works of other artists, authors, poets, musicians, etc.? You will also need to explain the medium or genre in which you plan to work, how you will execute the project, and the artistic statement you expect to make with your work. Finally, you will want to explain what you personally hope to learn or gain from doing the project. A senior project proposal for a creative or problem-solving project that does not itself involve written work should also detail how you will document the product – for example, through film, photographs, slides, etc.

At EMU, most senior project proposals are two to three pages long, although some have been as many as 10

pages long (especially in STEM fields). Your senior project advisor should help you define the appropriate structure, content, and length for your Senior project proposal!

Is it Possible to See Examples of Other Students' Senior Project Proposals and Completed Projects?

Previous students' senior project work can be found in the Senior Honors Theses and Projects section of EMU <u>Digital Commons</u>, an EMU library database. The Digital Commons archive includes all projects completed by students who signed the Library Release form to allow their work to be stored in the library database. Students may also access senior projects completed prior to 2019 from the senior project bookshelves in the downstairs lounge of the Honors College building. Students interested in seeing sample senior project *proposals* should contact the Dean or Associate Dean of The Honors College.

What Happens If I Can't Do Everything I Planned in My Proposal?

As you work on your project, you may find that you will not be able to complete exactly everything you said you would do in your proposal. This is a common occurrence and should not be a cause of major concern. Typically, the student and senior project advisor agree that the proposed project was too large or too broad, and they come to an agreement on ways to narrow the focus of the project. Sometimes the student and advisor discover that necessary materials or equipment are unavailable. They then consult with the Departmental Honors Advisor and agree on ways to modify the project in light of that new information. It is also okay to change the focus of the project as long as the senior project advisor and Departmental Honors Advisor agree to the changes!

What Happens if I Don't Finish on Time?

If you do not file your completed senior project with The Honors College by the <u>deadline</u> specified in this handbook, *you will not be able to graduate with Honors in that semester*. You will need to contact the Dean of the Honors College to discuss your options. One option is to delay graduation until the subsequent semester – which will give you time to complete and submit the project. A second option is to choose to graduate immediately, but to do so without earning Departmental or Highest Honors. If you are enrolled in an Independent Study course, there may be additional issues to consider (see above), as you will not have completed the course. If you do not need the Independent Study course to meet degree requirements, you can take an Incomplete in the course and still graduate. The Dean of the Honors College will discuss the course grade with you, if that issue is relevant.

If you do not plan to graduate in the term in which you initially intended to complete your project, you simply need to complete the project by the deadline for the term in which you intend to graduate. If you are enrolled in an Independent Study course, you should ask your senior project advisor to give you a grade of Incomplete for that course. When you complete the project, your advisor will submit a Change of Grade form to convert the Incomplete to a letter grade.

V. WRITING THE SENIOR PROJECT

The Order of the Senior Project Components

All Senior projects should consist of the following sections:

- 1. Title Page
- 2. Abstract (a 150- to 300-word summary of the project)
- 3. Acknowledgements (optional)
- 4. Table of Contents
- 5. The Body of the Senior project
- 6. References
- 7. Appendices (if applicable)

These sections are described in greater detail in the Manual of Style of this handbook.

The general rule is that you should follow the conventions of your academic discipline in preparing your senior project document, so the information below is provided as a guideline, rather than as absolute rules that you must follow. You and your advisor may modify the structure of the senior project to fit your discipline, your goals, and your specific project.

Typical Structure of a Research-Based Senior Project in the Sciences and Social Sciences

Typically, the body of a standard, research-based Senior project includes the following sections:

- 1. **Introduction/Background:** The introduction or background section (sometimes called a Literature Review) should include a clear statement of the subject under investigation, the questions the project will attempt to answer, definitions of important terms, and a rationale for the study and the structure of the project. The introduction should also review previous work on the topic and any sources that helped you develop your question or hypotheses. If you plan to test hypotheses, those hypotheses should be clearly stated, typically toward the end of the introduction.
- 2. Materials and Methods: This section describes in detail how the study was done. It describes the materials and methods used to complete the project -- the instruments used, data collection and analysis, performance principles, etc. This section often has subsections with sub-headers. For example, in the field of psychology, the Methods section may have sub-sections, such as Participants, Procedures, Materials, Equipment, etc. You and your project advisor should determine what the appropriate sub-sections are.
- 3. **Results (or Findings):** This section of the project provides a careful analysis of results with convincing evidence to support the argument presented in the introduction, along with an analysis of the results of testing any hypotheses presented in the introduction. Charts, tables, figures, or other graphic aids may be used in the presentation of results and should be incorporated into the text, rather than appended at the end of the senior project.
- 4. **Discussion or Conclusions:** The final section summarizes the results and significance of the research, addresses unexpected findings (if any), discusses the limitations of the project, and

addresses directions that future work in the area should take. In some disciplines, Results and Discussion may comprise a single section.

Typical Structure of a Senior Project in the Humanities and Related Disciplines

Scholars from the humanities and related disciplines do not typically write a senior project that is a report on data they collected or analyzed. Instead, they write a senior project that builds an argument. That argument should involve a unique take on work in the field. An argument is a statement that can be supported or contradicted with evidence. For example, an art history student might argue that Paul Cézanne should be considered the "Father of Modern Painting." They would then need to explain why Cézanne deserves that title as well as why other artists (e.g., Picasso, Manet, Titian) do not deserve that title. The goal is to convince the reader that the writer's perspective is substantial, relevant to the field, and reasonable through the use of argument.

This kind of senior project often resembles a long research paper in form, but it is typically different from a class paper. It tackles a problem that others have not yet addressed adequately or approaches the problem from a new angle. Research into what others have said and done is the essential first step, but your senior project should go beyond prior work to include your own insights and critical thinking. You should have an acquaintance with the relevant scholarship and display originality in the formulation of your arguments.

A senior project in non-scientific fields should have at least three sections and may have more:

- 1. Section 1: Introduction/Background/Literature Review. The centerpiece of the introductory section is the thesis statement that is, what you intend to argue in the project. A **thesis statement** is a short statement that summarizes the main point or claim of an essay, research paper, etc., and is developed, supported, and explained in the text by means of examples and evidence. Subsequent sections of the work flesh out the argument.
- 2. Section 2: The middle section or sections in this type of senior project typically addresses various aspects of the topic necessary to build the overall argument. The student and the project advisor are responsible for deciding how many subsections the project should contain.
- 3. **Section 3: Conclusion.** The final section of a senior project in the Humanities sums everything up. Just as the introduction acts as a bridge that transports readers into the "place" of the analysis, the conclusion explains why all your analysis and information should matter after they put the paper down. The conclusion allows you to have the final say on the issues raised in your paper, to summarize your thoughts, to demonstrate the importance of your ideas, and to propel your reader to a new view of the subject.

Typical Structure of a Creative Senior Project

A creative senior project <u>never</u> consists of just the creative work itself. In addition to whatever creative product you prepare, the creative Senior project needs at a minimum two additional written sections – an introduction that explains the goals of the project and an evaluative piece that assesses whether and to what extent the student reached his or her goals. A senior project that involves a creative effort should contain the following sections:

1. **Section 1: The Plan**. The Introduction describes what you wanted to accomplish in preparing the creative work, what goals you set for yourself, and why you set those goals. It also typically

contains a discussion of the historical, cultural, and/or theoretical context of the work and explains how the work of others in your field has influenced your work. If you develop a manual, website, or curriculum, you should explain why you believe the project is necessary and valuable. The introduction should also describe how you approached the production of the creative work and the steps you took as you developed your work. Your original senior project proposal may form a portion of or most of the introduction. Keep in mind, however, that you should have written your Senior project proposal in either the future or present tense (e.g., "My goal in doing this Senior project will be/is to...."), so you will need to go back through the proposal and change to the past tense (e.g., "My goal in doing this Senior project was to....").

- 2. **Section 2:** The Creative Product. This section contains the actual creative work that you produced. If the product involves creative writing, then the text should appear here. If the product was a website, you should include printed copies of the various pages of the website and a link to the website. If the product is not written, you should refer the reader to the creative piece that is attached to the text recording a set of photographs, link to a YouTube video, etc. If the product involves a performance, the student should record the performance. If the product is a visual one e.g., sculptures or paintings slides of the work should be included in this section.
- 3. Section 3: The Reflection. This section contains your reflection on the process of producing the creative product. It should address whether you accomplished your original goals, how and why those goals changed as you worked on the project, etc. You may also wish to describe the creative process you engaged in as you worked on the product. This section should also address your own feelings about the work you developed, what you might have done differently or would do differently the next time, etc.

While there may be more variation in the organization of the description of a creative work than there is in a standard research-based senior project, the written portion should tell the reader what you did, how and why you did it, and how well it turned out.

If you look for samples of creative works that are on file in Digital Commons or the Senior project Archive, you may find projects that do not include all three sections outlined above. Even though not all students who produced creative theses in the past included these sections, current students who plan to produce a creative work to earn Departmental and/or Highest Honors MUST include Plan and Evaluation sections with their creative products.

How Long Should My Senior Project Be?

The most frequent question that students ask when they undertake a senior project is "How long should my project be?" There is no simple answer to this question, as there is no set minimum or maximum length for a senior project. The correct answer is, "However long it takes to cover your topic adequately."

Your senior project advisor should help you determine how many pages it will take to cover the topic adequately and should give you guidance regarding the length of the senior project they expect to see. A senior project is a major undertaking, so it is reasonable to expect the work to be longer than a paper for an individual class -- although, in the sciences and social sciences, much of the time involved in completing a Senior project goes into data collection, rather than writing. A look at Digital Commons indicates that papers in biology, chemistry, and psychology are typically 20-25 pages with a few as short as 15 pages and some as long as 30 pages. Papers in mathematics and computer science have been as short as 10-15 pages and are rarely longer than 25 pages. In contrast, papers in history, sociology, English, and political science are more varied in length, ranging from 25 or 30 pages to as many as 75 or 80 pages (with most between 35

and 50 pages).² The introduction and reflection sections for a creative project are typically at least 4-6 pages each in length.

What Stylistic Requirements Does My Senior Project Have to Meet?

Stylistic requirements and guidelines are specified in the senior project <u>Manual of Style</u>, available at the end of this Handbook. You should follow the guidelines for footnotes and references (or bibliography) that are appropriate to your specific academic discipline. *Your Senior project advisor should provide guidance on stylistic guidelines for references, etc.*

Partners in Research: Where to Find Help

Where can you find help if you are having trouble with the research or writing that your project requires? There are a number of sources of assistance if you are having trouble with any phase of the research or writing process – including finding appropriate resources, starting your first draft, preparing IRB forms, revising, etc. An obvious first step is to approach your senior project advisor and explain your problem. They may be willing to sit down with you and help you address the problem. Many faculty members are pressed for time, however, and may not be able to give you all the support you need.

The **Bruce T. Halle Library** at EMU offers information sources, services, citation management tools, and one-on-one help that can support your success as a researcher. To complete your research, it is helpful to understand the research process and how to access information resources effectively and efficiently through the Halle Library. There are a number of online sources that can help you develop these skills. The Halle Library offers guidelines on <u>How to Use the Library</u>, which provides direction on finding articles, audio, video, images, books, and e-books and explains how to request items or find them on the shelves. The website titled <u>Research: The Basics</u> focuses on choosing a research topic, finding scholarly sources, finding, understanding, and using sources, and understanding and avoiding plagiarism. The <u>Research: Next Steps</u> website provides guidelines regarding how information is created, defining and exploring primary vs. secondary sources, and an overview of quantitative and qualitative methods in the social sciences.

Students can also seek individualized assistance from a librarian. EMU librarians are professors with advanced degrees in information science and often other disciplines as well. They are experts in the use, access, assessment, and management of information, and they are happy to assist students with their research. You can request help at the Information and Reference Desk on the first floor of the Halle Library, drop in at the <u>Academic Projects Center</u> in 116 Halle Library (between the hours of 11:00 a.m. and 5:00 p.m.), contact a librarian via the online chat system, or make an appointment to meet one-on-one with a librarian on the Halle Library <u>website</u>.

The EMU <u>University Writing Center</u> (UWC) offers writing resources and support to all undergraduates and students. Students can receive assistance from the UWC for any stage of the writing or revising process in person, over Zoom, or via written feedback consultations. Students can schedule an appointment with the UWC via the UWC <u>online</u> system. You can access tutorial videos and PDFs with tips for writing and using technology through the UWC Student Resources Canvas site by emailing <u>writingcenter@emich.edu</u> to request an invitation to join. The UWC is located in Halle Library 115.

If all else fails and you still need assistance with research or writing, you can talk to the Associate Dean of the Honors College about the challenges you face.

² Figures for the length of the senior project refer to text *only* and not to reference or bibliography sections or appendices.

VI. SECURING FUNDING FOR YOUR RESEARCH

The University as a whole provides undergraduates students with multiple sources for funding the cost of their research or the time they spend conducting research. Students can find this funding both inside and outside The Honors College.

Undergraduate Research Fellowship Awards - Honors College

Many Honors students apply for <u>Undergraduate Research Fellowships</u> to help support their research. The program has three levels of funding:

- *Undergraduate Research Fellowship*--\$1500 stipend for scholarly/creative activity in one designated semester (summer, fall, or winter).
- Senior Thesis/Project Fellowship--\$2000 stipend in one designated semester (summer, fall, or winter), specifically in support of a Senior Thesis/Project. The Honors College offers Senior Thesis Awards annually for particularly well executed projects. These awards are very competitive and are intended to acknowledge outstanding work. The student must have submitted the Senior Project Proposal prior to request a Senior Thesis/Project Fellowship.
- Renewal of a Research Fellowship --\$1000 stipend for an additional designated semester; contingent on the strength of the renewal proposal and the availability of funds.

Applications for <u>Undergraduate Research Fellowships</u> are due November 1 (winter) and April 1 (summer and fall). Students may receive up to three Undergraduate Research Fellowship Awards (one from each category). Applicants must have completed at least 56 credit hours at the time of application and be enrolled as a full-time student in good standing with the Honors College. Approximately 45 awards are granted annually, following faculty review and of applications. These awards require active faculty involvement in the research.

Undergraduate Research Stimulus Program (URSP) Awards

The <u>Undergraduate Research Stimulus Award (URSP)</u> is funded through the EMU Provost's Office and is intended to facilitate research partnerships between undergraduate students and Eastern Michigan University faculty. Successful student applicants receive a \$2,200 fellowship in support of their research efforts. The collaborating faculty member receives \$600, which they can use for lab/studio supplies or equipment, professional travel, or other professional expenses.

Undergraduate Symposium Scholarships

<u>Undergraduate Symposium Scholarships</u> are available to any student who participated in the most recent Undergraduate Symposium at EMU. Awards range from \$300 to \$800 and are granted for the following fall semester. Seniors may earn Undergraduate Symposium Scholarships if they are continuing on to graduate work at EMU.

Founders Award

The <u>Founders Award</u> was instituted in 1994 by former director and founder of the EMU Honors Program, Dr. Robert Holkeboer. Its purpose is to aid students in pursuing an experiential learning opportunity, such as study abroad, an unpaid internship, involvement in research, or a workshop or certificate course. Two to three awards of \$400-\$750 are offered each year. The application deadline is April 1st for the next academic year.

VII. MISCELLANEOUS CONCERNS

What If I Want to Change Project Advisors?

If you find you cannot work with your senior project advisor in a satisfactory fashion, if your advisor leaves the institution, or if you change the focus of your topic and realize that another faculty member would be a more appropriate advisor for your new topic, you have the option of changing your advisor. If you wish to change advisors, you *must* submit a request for a change in project advisors to the Office of the Honors College *in writing*. If you are seeking Departmental Honors, the Departmental Honors Advisor must also approve the change in advisors.

In general, however, *it is not a good idea to change advisors* and you may encounter problems and delays if you choose to do so. It can be particularly difficult to change your project advisor if you are enrolled in an Independent Study class. Students are encouraged to talk to the Associate Dean of the Honors College if they are considering changing their Senior project advisor.

What Happens If I Do Not Have "Good" or "Positive" Results?

Students who write research-based theses often worry that their senior project will not work out. That is, they are concerned that the data they collect will be unable to support their hypotheses or meet their objectives, so that they will essentially have "no" results. You should not be overly concerned with this issue. Failure to support hypotheses is a common result of research in the sciences and social sciences.

While graduate students typically cannot submit a project that does not yield significant results to earn a Ph.D. or Master's degree, being unable to support your hypothesis is not a problem in an undergraduate senior project. The goal of conducting a research-based senior project is for you to learn about the process of conceptualizing a study and collecting and analyzing the data. As long as you followed the procedures laid out in your project proposal, the actual results of that process are unimportant. Instead of having to redo the study or give up on your senior project, your job in the Discussion or Conclusion section of your paper is to explain what you think went wrong. Was something wrong with your methods that may have kept you from supporting your hypotheses? Do you think your theory and, hence, your hypotheses were wrong?

Final Words of Wisdom

- 1. *Get an early start*. If you are beginning your last year at EMU when you read this handbook, you are already at a disadvantage. You will be most successful in completing your senior project on time if you identify a topic and a senior project advisor well before your final year of college begins. If you plan to work on your senior project in consecutive fall and winter terms, you should have a topic and advisor identified no later than the end of the winter semester before you begin. If you plan to work on your senior project in consecutive winter and fall terms, you should identify your project advisor and topic no later than the previous November. If you are in STEM fields or psychology, you will probably need THREE full fall and winter semesters to complete the project.
- 2. **Begin writing early in the process!!!** As soon as you complete your preliminary research, start writing!! Write even if what you write seems flimsy and superficial. The biggest mistake you can make is to keep putting off writing. The longer you procrastinate before beginning to write, the

more daunting the task will seem.

- 3. Avoid thinking of your senior project as of monumental significance in the grand scheme of things. This project is not your life's work. It will certainly not be the definitive statement on the topic, either. The more you inflate the importance of the work, the more the prospect of researching and writing a senior project will intimidate and overwhelm you. Many senior project students try to accomplish too much. It is better for your senior project to be narrow and deep, rather than broad and superficial.
- 4. Decide at the start of your project how many hours per week you need for work on the project and STICK TO THAT COMMITMENT!! Working at a steady pace produces better results than trying to complete the whole project in two weeks. For many students, working on a senior project is the first occasion where they need to set their own deadlines. Because there are few externally established deadlines, students are often tempted to do other things first (e.g., their work for other courses). Don't make your work on the senior project a low priority simply because you have no exam dates or other firm deadlines!
- 5. **Set small, easily realizable, weekly goals.** Your grand aim is the production of an acceptable senior project, but if you set your eye only on that goal, you will find it difficult to reach. Completing a series of small steps is the best way to complete your project. Block out time on your calendar for reading, library research, time in the lab, writing, editing, etc.
- 6. Schedule frequent (preferably weekly) meetings with your senior project advisor to discuss your progress and then ATTEND THEM! If you see your advisor once a week, you will feel pressed to accomplish something each week. Remember that your advisor has primary responsibility for approving your project. They could decide not to approve your project if you have not had regular contact with them. Once you miss one meeting, it becomes easier to miss a second. And then a third.
- 7. **Do not expect your senior project advisor to come looking for you.** You are responsible for scheduling appointments and determining what you need to do to accomplish your goals. If you send one email and receive no response, send another. If you still receive no response, go to your project advisor's office. If your advisor says, "I'll send you some things to read" or "I'll let you know when the materials are in," and you don't hear from them for several days, FOLLOW UP.
- 8. **Don't ignore deadlines!** The deadlines listed in this handbook may feel unrealistic, but if you follow these deadlines, you will have adequate time to edit and polish your work. Faculty and administrators will also have adequate time to read your work and provide you with feedback. Spending the last week of the semester sleeping two hours a night and hovering on the brink of hysteria during your waking hours accomplishes little. It certainly does not improve the final product and does not endear you to the individuals who have to read your project **The deadlines are set to protect BOTH the student and the faculty members and administrators who read the project.** If you miss deadlines, you cannot expect others to read your work on your timeline. On the other hand, if you meet all the deadlines and someone fails to read and provide feedback on your work, the Honors College will accept your work without the signature of that individual.
- 9. When you are setting up a timetable for your project, remember that it often takes longer than expected to complete a task. A good rule of thumb is to estimate the maximum amount of time you believe it will take to complete a task in the worst possible case then double your estimate.

VIII. WHAT HONORS STUDENTS SAY ABOUT THE SENIOR PROJECT

Because the words of other students are often most valuable, we interviewed several Honors alumni about their experiences completing a senior project. The Honors alumni responded to questions regarding their decision to complete a senior project, how they found a topic and project advisor, and what they gained from completing the project. We also asked if they had any advice for students who were beginning the senior project process. We include a collection of their responses here.

Why did you decide to complete a senior project?

"I had very high aspirations concerning graduate school. Therefore, I had to distinguish myself from all the other students with high GPAs out there, demonstrate my initiative and excitement for [the field], and conduct a research project to develop some advanced skills. It worked!"

"Because I wanted to graduate with Highest Honors. Looking back on it, though, it was the single greatest piece of work that I had ever accomplished."

"Frankly, I wanted to receive Honors. Secondly, I believed the freedom of a creative writing project could only be fully appreciated in The Honors College."

"At first, it was because I wanted to graduate with Honors, but by the time I truly made the decision, it was because I was excited about having the chance to spend the kind of graduate-level time and research on a topic that really intrigued me. I realized early on that the senior project would be a huge challenge, but would be the kind of 'epic' intellectual opportunity that I was really hungry for.... Being able to do my Senior project on 1960's American Art was like a dream. It seemed more like a reward than a task!"

"To make myself more competitive for the [medical] schools I was applying to."

How did you identify your senior project topic?

"I knew I wanted to do something in genetics and, with a lot of help from the Honors Program, I was able to find a lab to work in and someone interested in the same area of research that I was."

"I first did an Independent Study and the topic just evolved. My senior project advisor and I discussed some things we found lacking in the existing literature."

"The topic was a synthesis of my personal interest in traditional healing practices and from conversations with my advisor on similar traditions and practices among Comanches."

"I went to each of the biology professors and told them that I wanted to do a senior project and asked them if they had any projects.... I basically decided on my project based on my interests, the ability to work with the advisor, the project, and the small need for funding --in that order."

"I simply examined several of my recent ideas and current projects [in creative writing]. I chose the most

interesting and extensive topic to base my senior project on."

"Based on topics we had glazed over in class, but which I felt warranted special attention. Also, my project advisor took my initial ideas and really helped me focus them through further research."

"My senior project advisor helped me identify my topic. He had been working on a project before I approached him and my senior project continued on the same trail."

How did you find a senior project advisor?

"Finding a senior project advisor was not easy and I suggest starting early. If you are not already in good with any of your professors, I suggest reviewing EMU's website to read up on some of the great research that lots of professors are doing here. Then talk with the ones whose interests match up with you to see if any are interested in also working with you."

"I looked at all the professors' past and current research to see if there was any overlap with my interests. I was able to find a pretty close match."

"I knew the professor from classes and from being her SI leader, so we had already cultivated a relationship."

"I had already had one class with the professor, so I just asked. He had written his MA thesis on the topic that interested me so he was familiar with it. Also, I knew that he and I have different views on things and I wanted to make sure my arguments were sufficiently strong to stand up to his criticism."

"The professor and I had a history of three classes together and hours of conversation outside of class."

What did you gain from completing a senior project?

"Above all, I was able to develop a working relationship with people in the field of my interest. This is invaluable."

"A greater knowledge of how to research topics, but most importantly, once you have written a 32-page senior project, it doesn't seem so daunting to write a 101-page book or something like that."

"I now have a small, but polished body of poetry and prose, which I can use to apply to graduate schools, for various scholarships, and even paid positions. My writing has expanded and improved. Furthermore, I developed meaningful relationships with several intelligent and influential professors in my degree program."

"The interaction with my project advisor was by far the greatest benefit that I came away with. Her professionalism, insight, and incredible support, attention, and ability truly helped me improve so many aspects of my intellectual capacity.... Doing the senior project taught me intellectual rigor and truly advanced my critical analysis skills."

"I would not have my current job if I hadn't taken on the senior project. I also got an opportunity to work on exciting subject matter outside the realm of the basic computer science curriculum."

"I have become more critical of my writing, as well as of others'. I learned how to break down a question or problem and find the best way to answer it."

"All the practical stuff that goes into producing such a work has come in handy in graduate school."

"I learned more about research methodology and statistical analyses than any classroom course could have taught me."

"I feel much more prepared for graduate school since I've gone through the process. It made me more competitive and I ended up with various offers to graduate school. It strengthened my presentation skills and my self-confidence (except the first time I got a draft back from my advisor)."

What advice would you give to students considering completing a senior project?

"Start early!!!! Also, make sure you meet your own deadlines!"

"Make a plan about how and where you will work. Find a method of organizing [your] research. I ended up with everything unlabeled and a mess! Eventually, I learned to label and file everything, but you should do this from the beginning!"

"I wish I had started thinking seriously about the senior project in my freshman or sophomore years, instead of in my senior year."

"Pick something that is doable, but challenging. There can be a great sense of accomplishment in the end."

"Start early!! Take extra courses that appeal to you. Get INVOLVED in research that professors are doing as soon as possible. I can't stress that enough."

"Don't procrastinate. With my senior project proposal, I procrastinated and it was extremely stressful. With my actual senior project, I did not procrastinate and it was generally an enjoyable experience. Also, don't expect your advisor to contact you. They won't. Contact them, email them materials, drop by their office, and make sure you know their emails, phone #s, office hours, etc."

"Decide what topic you want to pursue, and then do it. Don't waste half the semester with it in your head; put it down on paper and distribute it to your advisor. The sooner you receive their opinion, the sooner you can revise and improve your senior project. Allow more time for revision and feedback."

"Involve your advisor and others--a lot! Someone told me once, 'If you show your science to more people, you will become a better scientist.' It's true for many different reasons. The more you talk about your work, the better you understand its strengths and weaknesses, the better a presenter you become, you learn new applications and insights that you may never have thought of or just a new way of looking at things."

"Go for it. The pain is worth it."

IX. MANUAL OF STYLE

Senior Project Sections

A senior project must include the following sections in the order listed below. Each of these sections should begin on a new page.

Title Page

All information on the title page should be centered. For specifics as to what to include, please refer to the examples of various title pages provided at the end of this Handbook. You can also download the *electronic template of the senior project <u>Title Page</u> that is available on the Honors College website.* These templates are formatted properly and should be the starting point for building your own electronic proposal or senior project document. Students should share their title page with the Associate Dean of The Honors College early in the semester in which they plan to graduate to verify that they have followed instructions accurately.

Acknowledgements (optional)

The Acknowledgements section encourages you to express your appreciation to those who helped you with your project and contributed to your academic and personal growth while you have been a student at EMU. This section is your chance to let the people who have helped you know how much you value their support!

Table of Contents

The Table of Contents should list all of the major sections and subsections of your project and should indicate the page number on which each section or subsection appears. See the Table of Contents at the beginning of this handbook for an example.

Abstract

The Senior project <u>must</u> include an abstract of between 150 and 300 words. The abstract is a summary of the project. For a traditional academic senior project, the abstract typically includes a statement of the problem, your argument or hypotheses, a brief description of your methodology, and a summary of your findings and conclusions. For a creativesSenior project executed in a non-written medium, the abstract typically includes a statement of the creative goal or problem, the historical and/or cultural context of the work, a discussion of the medium/processes used in the project's creation, and a brief description of the creative work.

Example of an abstract for a traditional academic Senior project (194 words):

"This study examined children's perceptions of their parents' experiences with negative emotions and the relationship between those perceptions and parents' reports of their willingness to display negative emotions. It tested three hypotheses: (1) that children would be more aware of mothers' than father's emotions; (2) that older children would be more aware of parents' negative emotions than younger children; and (3) that children whose parents reported expressing more negative emotions would be more aware of their parents' negative emotions. To test the hypotheses, 48 children, ages 6 to 10, were asked to answer questions about their fathers' and mothers' negative emotions. The children's parents completed a questionnaire concerning the likelihood that they would share negative emotions with their child. Major findings were that age, gender of parent, and the specific emotion influenced children's perceptions of their parents' emotions and that fathers' (but not mothers') reports of their own expressiveness were related to how much the children reported about their parent's emotional experiences. Unlike previous studies, age did not influence the extent

to which children cited themselves as the cause of parents' emotions. The discussion addresses implications for the development of gender stereotypes about emotion."

Example of an abstract for a creative Senior project (132 words):

"The goal of this project was to explore the process of using poetic themes as inspiration for the creation of several pieces of visual art. This has been done a number of times in the past, as with Monet's paintings based on Rimbaud's poetry. However, I could find no examples of this in the area of print-making. I was inspired by the work of poet Charles Bukowski. After obtaining his permission to use three of his poems, I decided that his ideas could best be expressed visually using the intaglio medium, incorporating the techniques of etching, aquatint, mezzotint, and drypoint. While on the whole, I was pleased with the outcome, it would have been beneficial to have had more contact with the poet, so that I could be clearer about his intentions."

Senior Project Body

The format for the body of the senior project should follow the conventions of your academic discipline. The body of the senior project will generally include a statement of the problem, a survey of existing literature, your argument (hypotheses), a description of your methods, your findings or results, and your conclusions (often including directions future work might take).

For a creative senior project, the creative product itself (or, as appropriate, its photographic, video, or auditory representation) is the heart of the senior project document. However, *the creative product is not the entire senior project*! You must describe the creative product in a thorough essay, usually preceding the presentation of the creative work. The essay should describe the medium and why you chose that medium and critique your success in achieving your creative goals. In other words, the reader should learn exactly what you did, why and how you did it, how well (in your opinion) it turned out, and what you would do the same or differently if you did it again. This additional, written piece of your creative project should also demonstrate your familiarity with similar work in your field by discussing the project's historical, cultural, or creative framework. As with a traditional academic senior project, the format of the body should follow the conventions of your discipline.

Footnotes/Endnotes (if applicable)

You should use whatever form of citation that is dictated by the discipline in which you are writing. Your project advisor is the appropriate source for advice on documenting your sources. Notes can appear as footnotes (at the bottom of the page where the number appears) or as endnotes (at the end of the text).

References

The senior project must include a list of all sources cited in the text. You should use whatever form of bibliographic citation is appropriate for your discipline. Your project advisor should notify you of the appropriate citation format. You should consult with a librarian for assistance with citation styles.

Appendices (if applicable)

Any supplemental data, such as tables, graphs, illustrations, photos, or other material (e.g., survey or research instruments) that you mention in your writing, but do not include in the body of the senior project, should be included as appendices, following the conventions of your academic discipline. As with all other parts of the

senior project, your appendices should have 1-inch margins on all sides.

Senior Project Format

Students submit an electronic version of the senior project to The Honors College. The formating of the electronic copy and printed title page must adhere to the following standards:

- 1. The Title page must follow the guidelines specified on the title page templates.
- 2. **Margins:** You must use 1" margins throughout your Senior document. This rule applies to the entire project, including the title page and all appendices, diagrams, and figures.
- 3. **Fonts:** The senior project must be typed in 11.5 or 12-point font. The text must be justified on the left side. Full justification is optional If you justify the right-hand margin, you must do so consistently throughout the entire document (except for figures, tables, and appendices).
- 4. **Line Spacing:** The ENTIRE BODY OF THE SENIOR PROJECT, including the abstract, table of contents, acknowledgements, and text must be <u>double-spaced</u>. Footnotes, endnotes and references may be either single-spaced within each entry and double-spaced between entries or double-spaced throughout. Appendices must adhere to margin requirements, but they do not have to conform to spacing requirements, except in the labeling and titling of each appendix.
- 5. **Page Numbering:** Page numbers must appear either at the top or the bottom of the senior project and must be centered or right-justified. The page numbers are placed 0.5 inches from the page margin. The Title Page should be page 1, the Acknowledgements (if applicable) page 2, the Abstract page 3, etc. Continue with numeric symbols throughout the document.
- 6. **Direct Quotations:** Direct quotations of up to five lines in length should be included as part of the body of the text and enclosed by quotation marks. Longer quotations should be indented and set off from the main flow of the text. All quotations should be referenced in a method appropriate to the discipline.
- 7. **Citation:** You may use any form of bibliographic and footnote/endnote citation appropriate for your discipline. Your senior project advisor should notify you of the appropriate citation format.
- 8. **Insert all Figures and Tables** directly into the body of the text.

Other Formatting Instructions

If a single line of text appears either at the top or bottom of a page, a page break should be inserted so that no single line of text stands alone.

Section or chapter titles should be numbered (e.g., **SECTION 1: INTRODUCTION**). Section titles must be written in all capitals and 14-point boldface font, centered on the page. Sub-sections may also have sub-headings (e.g., **Data Collection**) that are written in progressively smaller font sizes (but never smaller than 11.5). Such divisions should be parallel and consistent between sections and must be included in the Table of Contents.

Avoid auto-hyphenation programs. When it is necessary to hyphenate, make sure your choice will not confuse or inconvenience the reader.

Mathematical or chemical equations should be set off from the text in the same manner as a long quotation. Equations that will be referred to again in the text should be numbered or lettered in a consistent style and the label placed in parentheses or brackets. Equation editors and Greek alphabet fonts are available in most word processors.

Foreign language phrases, including genus and species names, should be italicized in the same font as the text. The first time a species name appears, it should be spelled out completely, with the genus capitalized and the specific name in lower case. Subsequent occurrences may abbreviate the genus (e.g., *E. coli*).

Senior Thesis Checklist

The listing below has been created to support planning through the Senior Thesis process. Make notes of areas of particular interest, questions that seem most intriguing, and new ideas that emerge from other research or creative projects throughout your undergraduate studies. Set up a meeting with your Departmental Honors Advisor no later than the middle of your junior Reach out to potential faculty advisors from your Department and set up a meeting to discuss potential projects. Complete the Senior Thesis Proposal with a brief description of the project and submit it to the Honors College (via email) once you have agreed on your project with your project advisor and the Departmental Honors Advisor. Make sure you submit your proposal by the beginning of the last month prior to the semester of your graduation. Obtain Human Subjects approval, if necessary. Check with your project advisor to determine if IRB approval is necessary for your project. Please note: All research using human subjects must obtain ethics approval from the University Human Subject Research Committee (UHSRC). You must obtain approval prior to starting your research. It usually takes between 3 to 4 weeks from the time you submit your application to obtain approval, so please plan accordingly. The UHSRC uses an online submission system to complete the application, which can be accessed from the Research compliance website. Instructions for completing and submitting the Human Subjects application are also available on the website. Please direct questions about human subjects approval to your project advisor or the Office of Research Compliance (human.subjects@emich.edu; 734-487-3090). Complete as much work as possible in the next-to-last semester before graduation. Edit your thesis carefully and seek help from an editor as needed. The thesis will be published in Digital Commons so you will want it to reflect your very best work. Secure approval of your project from your project advisor, the Departmental Honors Advisor, and the Department Head. All will read the project and sign the Approval Form once they are satisfied with the quality of your work. Once you have received these approvals, submit your thesis/project to The Honors College at EMUHonors@emich.edu. Make sure you check the deadlines for the various steps in this process to leave sufficient time for changes and corrections! Complete the two pages of the Library Release Form and submit it with your senior project.