

Guidelines for the Honors Thesis Course ASTR 29900

ASTR 29900 Honors Thesis is an independent research course, supervised by a faculty member, in which the student either contributes to a faculty research project or engages in an approved independent research project for the academic year. Eligible students enroll in ASTR 29900 once in any quarter during their fourth year. Please note that the College does not allow students to receive academic credit for paid work or for research that was completed prior to enrollment in ASTR 29900. Research that was begun before enrollment may be continued as, or serve as the basis for, the thesis research.

Eligibility

- This course is open to students who are majoring in Astrophysics with fourth-year standing and approval of a thesis topic.
- The student must earn a G.P.A. of 3.50 or higher in the required courses for the Major and 3.0 overall, or obtain consent from the Deputy Chair for Academic Affairs.
- The student must have an approved research project that will be supervised by a faculty member.
- Research faculty are eligible to serve as research supervisors, as are faculty in the Physical Sciences Division. Students must obtain consent from the Deputy Chair for Academic Affairs when the supervisor is a member of the research faculty or faculty outside of the Department of Astronomy and Astrophysics.

Enrollment

- A student should first confirm that eligibility requirements to enroll in ASTR 29900 are met. Please direct any questions about eligibility to Dr. Julia Brazas, Academic Affairs Administrator.
- All students should complete the Honors Thesis Form at the end of this document and return it to Dr. Brazas by the end of 3rd week of the Autumn Quarter.
- Enrollment takes place during the drop/add period of any quarter, using the Reading and Research form at the end of this document. This form should be completed and submitted to Dr. Brazas before the 3rd week of the quarter in which the student wishes to be enrolled in ASTR 29900.

Requirements

The student's thesis research should consist of substantial and significant enough results to be presented at a large-format scientific conference, e.g. AAS or IAS, or of sufficient import and quality to be submitted to a smaller publication like the AAS Research Notes. The Honors Thesis does not have specific format requirements other than being similar to scientific papers published in professional journals; i.e., they should contain a concise abstract, a comprehensive introduction that reviews the general topic (more extensively than a typical publication), followed by presentation of the work itself: the data or theory used,

analysis methods, results, and main conclusions. Students should seek guidance from their research supervisor as to any specific formatting requirements. Examples of Honors Theses are available in the Academic Affairs Administrator’s Office.

All students completing Honors Theses will present their research to members of the Astronomy and Astrophysics Department at a public event in the 8th or 9th week of the Spring Quarter. Presentations should last approximately 15-20 minutes, including time for Q&A. The presentation does not have specific format requirements, unless specified by the student’s research supervisor.

An electronic copy of the final thesis must be filed with the Department of Astronomy and Astrophysics by email to Dr. Brazas at julia@uchicago.edu. Exemplary theses will be advanced for consideration in undergraduate research award programs. Students are strongly encouraged to submit theses to The University of Chicago Library’s Knowledge@UChicago <https://knowledge.uchicago.edu/>, an open access repository of scholarly work at Chicago.

Administrative Timeline

Autumn		Winter		Spring	
Due by the end of 3rd week	Complete A&A Honors Thesis Form and return it to Dr. Brazas.	Due by the end of 3rd week	If enrolling this quarter, complete the Reading and Research Form and return it to Dr. Brazas.	Due by the end of 3rd week	If enrolling this quarter, complete the Reading and Research Form and return it to Dr. Brazas.
Due by end of 3rd week	If enrolling this quarter, complete the Reading and Research Form and return it to Dr. Brazas.	Before end of the quarter	With the research supervisor, identify two additional readers of the Honors Thesis and determine a schedule for providing the paper to them and getting feedback.	Before the end of 5th week	Provide Honors Thesis to additional readers and solicit feedback. (This timeline should be arranged in consultation with the readers and research supervisor in Winter Quarter.)
				Before the end of 7th week	If recommended, make any final edits based on feedback and finalize Honors Thesis.
				Due by 5:00pm on Friday of 8th week	Final grade for the Honors Thesis is due for students who enrolled in Autumn or Winter.
				Due by 5:00pm on Friday of 9th week	Final grade for the Honors Thesis is due for students who enrolled in Spring.
				8th-9th week	Theses presentations; provide a title and abstract to Dr. Brazas.
				Due by end of 10th week	Students submit final theses to Dr. Brazas and Knowledge@UChicago

Expectations for Completing the Honors Thesis

Specific Expectations of the Research Supervisor and Student

- Establish a regular schedule of meetings/communication for the duration of the research project and preparing the thesis. The frequency of these meetings should be once per week.
- Identify the best mechanisms for communication (e.g., if email is likely to get buried it may not be effective) and appropriate time frame to expect a response.
- Establish a process for documenting discussions/feedback that help refine thesis content.

Specific expectations of the Research Supervisor

- Help the student identify a thesis project of appropriate scope.
- Advise and guide the student in planning the execution of the research to be conducted.
- Provide timely feedback.
- Honor scheduled meetings.
- In consultation with the student, identify two additional readers of the Honors Thesis by the end of Winter Quarter. Readers can be selected from among faculty and research professors in the Physical Sciences Division. If appropriate, faculty and research professors from BSD and IME, as well as postdoctoral scholars and Argonne/Fermilab scientists, can be included as readers.
- In consultation with the student, determine a schedule for completing a draft of the Honors Thesis so that it can be shared with the additional readers before the 5th week of Spring Quarter with feedback provided no later than 7th week of Spring Quarter.
- Submit a final grade for the thesis by 8th week of the Spring Quarter if the student enrolled in ASTR 29900 in Autumn or Winter Quarters; 9th week if enrolled in Spring Quarter.
- Participate in a public review/presentation of the completed thesis held during the 8th or 9th week of Spring Quarter.

Specific Expectations of the Student

- By the 3rd week of Autumn Quarter, complete the Honors Thesis Form and submit it to Dr. Brazas.
- Enroll in one quarter of ASTR 29900 during the fourth year.
- Students are expected to work independently on their Honors Thesis project over three quarters, with guidance from their research supervisor.
- Provide drafts to the research supervisor at mutually agreed upon times.
- Honor scheduled meetings.
- In consultation with the research supervisor, identify two additional readers of the Honors Thesis by the end of Winter Quarter. Readers can be selected from among faculty and research professors in the Physical Sciences Division. If appropriate, faculty and research professors from BSD and IME, as well as postdoctoral scholars and Argonne/Fermilab scientists, can be included as readers.
- In consultation with the research supervisor, determine a schedule for completing a draft of the Honors Thesis so that it can be shared with the additional readers before the 5th week of Spring Quarter with feedback provided no later than 7th week of Spring Quarter.
- Participate in a public review/presentation of the completed thesis held during the 8th or 9th week of Spring Quarter.
- Submit final Honors Thesis to Dr. Brazas and to Knowledge@UChicago by the end of the 10th week of Spring Quarter.

Department of Astronomy and Astrophysics Honors Thesis Form (ASTR 29900)

Please complete this form and return it to Julia Brazas, Academic Affairs Administrator (julia@uchicago.edu, ERC 599A), before the end of the Consent Add/Drop period (3rd week) of Autumn Quarter.

Student Name: _____ Date: _____

Preferred email contact: _____

Proposed Honors Thesis Title: _____

Research Supervisor's Name and Title (print): _____

Campus Address: _____ Phone: _____

Email: _____

Agreement

I understand and agree to the **Expectations for Completing the Honors Thesis** listed in the Guidelines for the Honors Thesis Course.

Supervisor's Signature

Date

Student's Signature

Date

Expected quarter for enrollment in ASTR 29900: _____

Updated 9/2023

College Reading & Research Course Form

Students should email this form to the Registrar's Office (registrar@uchicago.edu), before the Friday of the third week of the quarter in order to add this course to their class schedule. Reading/research courses are not open to first-year students and only rarely to students in their second year. Students ordinarily may not register for more than one reading/research course per quarter. Departments may have additional regulations or forms for reading and research courses. Students should consult the College Catalog, their adviser, and the Director of Undergraduate Studies for the department of interest for further information.

Student's Name

UCID

Course and section (e.g. ENGL 29700)

Quarter and year (e.g. Autumn 2021)

Subject matter: _____

Work to be completed: _____

Faculty supervisor (print)

Faculty supervisor (signature)

Date

Faculty Supervisor CNET ID (required)

Dir. of undergraduate
studies*§ (print)

Dir. of undergraduate studies
(signature)

Date

§ Only for students registering for a B.A. paper with a faculty supervisor in a department outside of the student's major: student must obtain the signature of the director of undergraduate studies in the student's major.

* For BIOS 00299, the Undergraduate Research and Honors Chair signs here.

Note: the Registrar's office will only process fully completed forms.

Check this box to confirm that you have received the faculty supervisor's signature OR that you will attach or forward an email with the faculty supervisor's uchicago.edu email that proves their approval.

If required, check this box to confirm that you have received the DUS's signature OR that you will attach or forward an email with the DUS's uchicago.edu email that proves their approval.