

HONORS INDEPENDENT PROJECT (HIP) INFORMATION SHEET

One of the requirements to graduate from the Honors College is the completion of a major research project supervised by a project advisor. This project needs to be completed including the presentation within the student's junior year at TAMUK (between 60 and 90 hours completed).

The Honors Independent Project (HIP) results in:

- A PowerPoint presentation at an Honors College Research Symposium
- A one-page, double-signed abstract

Special formatting is required and will be provided during the Honors College HIP Orientation session.

The presentation time is eight (8) minutes with two (2) minutes for questions, however, that time length may be adjusted each semester based on the number of presenters.

The symposium is typically held on a Saturday so family and friends can attend the event. The Honors College Research Symposiums are held in the Fall and Spring semesters, and in Summer semesters when Honors students are graduating.

The project advisor should be:

- Faculty who directed research already done by the student
- Faculty whose research interest covers the HIP topic
- Faculty who work at TAMUK or the Irma Lerma Rangel School of Pharmacy
- Can be a TAMUK staff member with direct knowledge of the topic (must be approved by the Honors College before signing commitment form)
- Faculty or Industry Leaders for research/internships done elsewhere can serve as secondary project advisors; there must be a TAMUK faculty/staff member (or Pharmacy School faculty) attached to the project as primary advisor

Type of project to be presented (description and examples below):

- a. Laboratory or In-the-Field Studies
- b. Industry Analysis
- c. Literature Review (must include a minimum of five sources)
- d. Process Analysis
- e. Internship-based (permission may be needed from company)
- f. Study Abroad-based
- g. Competition-based
- h. Creative Arts (only for music and art majors)

Special Note on Surveys:

Surveys given to a specific type of population must be approved ahead of time by the Institutional Research Board (IRB) for humans, and Institutional Animal Care and Use Committee (IACUC) for animals. Surveys have to be completely developed then submitted for review. The review process could take 2 weeks to 4 months. No work can be done before board approval is obtained.

The process of designing, researching, and presenting and Honors Independent Project to complete this requirement to graduate from the Honors College

1. Meet with Honors College staff the semester 60 hours will be completed
2. HIP Commitment Form must be completed and signed by student and project advisor within two weeks after meeting with Honors College staff, at which time an orientation session will occur that include deadlines to be met
3. After HIP orientation, research should commence
4. Draft PowerPoint slides need to be submitted by deadline
5. Student needs to attend HIP practice session ready to present to others in the session; feedback will be provided by others in the session. (Practice presentation will be timed)
6. Final PowerPoint slides need to be submitted by deadline
7. Presentation at Honors College Research Symposium
8. Double-signed abstract needs to be submitted by deadline
9. Students complete the Honors College Exit Survey

Examples of Laboratory or In-the-Field Studies

Any type of research performed in a supervised laboratory or field setting

- Interpreting Well Cores from the Llano Uplift (Barker/McGhee)
- Student Perceptions: Does the P.E. Teacher Portray a Positive Role Model for Students to be Physically Active and Lead a Healthy Lifestyle? (K. Brown/Killion)
- Measuring the Efficacy of Auditory Verbal Therapy in Children with Hearing Loss (Bryan/Ball)
- Effect of Grazing and Soil types on Forb Production in South Texas (Cortez/Ortega-Santos)
- Thio-Bromo Click Reactions (C. De Los Santos/Hobbs)
- Changes in Courtship Behavior in Fruit Flies with Germ-free Gut (Esqueda/Velez-Hernandez)
- Epigenetic Regulation in Human Ovarian Cancer (Fakolade/Sung)
- Agricultural Sustainability of the Lower Rio Grande Valley (Hamaker/Turner)
- Citizen Science Data on Location of White-tailed Deer in Fair Oaks Ranch, Texas (Haynes/Hewitt)
- Autonomous Lawnmower Software Development (A. Hernandez/McLauchlan)
- Cultural Comparison of Native American Healing Methods and Mexican American Healing Methods and their Increasing Usage in South Texas (E. Hernandez/Reiser Robbins)
- Characterization and Classification of Castoff Spatter from Various Kitchen Knives (Johnson/Galloway)
- Hydromination of Alkenes with Rhodium Bis-Diphenylphosphino Monoxide Complexes (Medina/Hahn)
- Early Breeding Fall Born Ewes Lambs (Miano/Stanko)
- Response Time and Puzzle Solving Skills in Gamers vs. Non-gamers (A. Rosenbaum/D. Burt/A. Burt)
- Flattened Fauna: A Comparison of Road Kill Numbers (Slifka/Conkey)
- Testing of Antibiotic Treatments on Acne-causing Bacteria (Stroman/Laughlin/Velez-Hernandez)
- Neutron Moderation Study in a Shield for a Fusion-based Neutron Source (Weiss/Yang)
- A Study of Teachers' Opinions on Inclusion as a Method for Serving Special Education Students (A. Zuniga/Bradley)
- Qualitative Analysis of CBD Supplements using Gas Chromatography and Mass Spectrometry (Trevino/Castro)

Examples of an Industry Analysis

Presentation on an aspect of degree industry

- Speech and Language Techniques in Early Childhood (Ambriz/Seitel)
- The Effectiveness of Specialized Treatment Programs for Detained Juveniles in Texas (Barboza/Cooke)
- Continental and National Differences in the Financial Ratios of Investment Banking Companies: An Application of the Altman Z Model (Brou/Krueger)
- The Impact of COVID-19 on Supply Chains (Chavez/Haces-Fernandez)
- The Use of Acupuncture, a Traditional Chinese Healing Practice, in the U.S. (M. De Los Santos/Reiser Robbins)
- A Study of Online Marketing Approaches Used to Recruit Student-Athletes (Dimitrovska/Cicala)
- History of U.S. Environmental Air Regulations in the Chemical and Refinery Industries (C. Flores/Alexander)
- Operating in a Newsroom (F. Garza/Flores)
- Quantifying Urban Sprawl and Habitat Loss for Northern Bobwhite in Texas (Hannusch/Perotto)
- The Fast Food Addiction (Hayes/Deyhim)
- Technology and How Its Use Affects the Modern-Day School System (E. Hernandez/Lassmann)
- Cultural Comparison of Native American Healing Methods and Mexican American Healing Methods and their Increasing Usage in South Texas (E. Hernandez/Reiser Robbins)
- Determine a Sustainable Harvest Rate for Collared Peccary (Pecari tajacu) (Hewitt/DeYoung)
- Plata O Plomo: The Impact of Drug Trafficking on U.S.-Mexico Relations (C. Martinez/Goswami)
- Educational Experiences of Latinos throughout Generations (Medrano/Guzman)
- The Enron/Andersen Scandal (Montalvo/Huff)
- Effects of COVID-19 on Walt Disney World: A Financial and Marketing Review (Nevarez/Scalan)
- The Role of Licensed Veterinary Technicians in the Veterinary Industry (S. Ortiz/Hilton)
- Responsibilities and Credentials of Pharmacists at Different Types of Pharmacies (Pena/Killion)
- Industry Analysis of Anesthesia (S. Rodriguez/Castro)
- Contraceptives in Non-domestic Species in Zoo Medicine (M. Rosenbaum/Hilton)
- Industry Analysis of Water Filtration Systems (Scott/Isensee)
- Analysis of the Guide Industry (Summy/Kuvlesky)
- Money Laundering Risks and Anti-Money Laundering Policies in Different Countries (Vasquez/Scalan)
- Rural Land Fragmentation during the COVID-19 Pandemic (Moberg/Krieger)
- Economics of General Dentistry (Soria/E. Winterbottom)

Examples of a Literature Review (must include a minimum of five sources)

A literature review is a survey of scholarly sources on a specific topic. It provides an overview of current knowledge, allowing you to identify relevant theories, methods, and gaps in the existing research.

Writing a literature review involves finding relevant publications (such as books and journal articles), critically analyzing them, and explaining what you found. There are five key steps:

- Search for relevant literature
- Evaluate sources
- Identify themes, debates and gaps
- Outline the structure
- Write your literature review

A good literature review doesn't just summarize sources—it analyzes, synthesizes, and critically evaluates to give a clear picture of the state of knowledge on the subject.

(Source: <https://www.scribbr.com/dissertation/literature-review/>)

- Literature Review: Effects of Competition on Antibiotic Resistant Bacteria (Ayala/Laughlin)
- Voting Trends of Presidential Elections in Texas: 2008-2020 (Diaz/Goswami)
- A Comparative Analysis of Incarceration: Japanese Americans and the Detention of Asylum Seekers (Glenn/Melendy)
- The South Texan and Civil Rights (Sabawi/Flores)
- Literature Review of Depression, Anxiety, and the COVID-19 Pandemic (Tamez/Daughtry)

Examples of a Process Analysis

Describe how something is done

- Alcohol Addiction and Its Impact on Human Body (Alaskari/Quazi)
- Earthquake Engineering: Three-story Building Structural Analysis (Alba/Bailey/Aguiñiga)
- Ammonia Recovery from Wastewater for Reuse as a Fertilizer Additive (Alsop/Camacho)
- Exploring Different Algorithms for Computing Nash Equilibria (J. Balderas/Ahmed)
- Design and Selection Process of Aluminum Forms for an Unmanned Aerial Vehicle (Barrow/Ozcelik)
- Obtaining Venom for NNTRC Experiments (Belew/Sanchez)
- The Process of a City Project (Clancy/Peel)
- A Trial of Time in a Roller Coaster Pinewood Derby Track (Durham/Peel)
- Analysis of Financial Statement of a Public Company - AT&T, Inc. (Fletcher/Huff)
- Design of the Electrical System of a Museum Space Exhibit (Fuentes/Liu)
- What are Talking Circles and Why do the Citizen Potawatomi Nation use this Method to Resolve Disputes? (Lee/Hodges)
- Using pXRF to Map and Correlate Tuffs in Big Bend National Park (Mauck/Ford)
- Prosthetic Hand, Finger, and Actuation Component Design (Michalec/Isensee)
- The Effectiveness of Sound Deterrents on White-Tailed Deer and Other Mammals (Naegelin/Henke)
- Breastfeeding vs. Bottle-Feeding: Why Breast Really is Best (Oldag/Kang)
- Volatile Organic Compounds Emission Control Using Mobile Biofiltration (Potthast/Jones)
- The Holiday Effect Regarding Christmas Eve in the German and American Stock Market (D. Rodriguez/Daughtry)
- Cost Analysis for Reusable Grey Water System (Smith/Aguiñiga)
- The French Revolution – A Family Drama (Stridde/Ferguson)
- Cacao and Cocoa Products: Tree to Bar (Sutton/Rabe)
- Oily Sludge Degradation: A Bioremediation Approach (Walker/Alexander)
- Material Selection for Underwater Turbines (Webb/Lee)
- Auditory Attention Processing in Aphasia (White/Ball/Swartz)

Examples of an Internship-based Presentation (permission may be needed from company)

Report on the company where student interned, or

Report on what student did while an intern; opportunities taken, lessons learned

- Citgo Project: Injection of a Heavy Mole Weighted Gas To Prevent Compressor Surge (Arellano/Alexander)
- Impact of Internships: The Ramifications toward Engineering Students' Success (Bustamante/Le)
- NSF-REU Summer Research: Clarkson University and Texas A&M University (C. Chi/Castro)
- The Evolution of Media (DeFrees/Morris)
- Preparation and Characterization of Nano-materials Applied in the Biological Field for Water Purification (Dinn/Bashir)
- Permitting Emergency Fire Water Pump Engines (Escobar-Ellison/Bailey)
- Education Service Center, Region 2 Internship (Henning/Mishra)
- Hell on Earth: The Fort Bliss Experience (Limon/Diaz)
- Applications of Telemetry in Managing Attwater's Prairie Chickens (Macha/Gonzalez-Valenzuela)
- High Dynamic Range (HDR) Image Processing (D. Montez/Hicks)
- What Makes a Bad Teacher? (Perez/Miller)
- USDA's Animal Research Services (Ruiz/Baldwin)
- Running with the Bulls: ExxonMobil Internship Experience (Trevino/Rahmani)
- What is FDIC? (E. Whiddon/Procasky)
- Learning through a Pandemic: An Analysis of Education (Brooks/Flores)

Examples of Study Abroad-based Presentations

Report on study abroad trip, itinerary, required activities, and special degree-related events the student organized to enhance their trip

- Animals and National Identity: How Bhutan Explains Life (Davison/Goswami)
- Incorporating Sustainability Principles into Early Childhood Education:
- Lessons from Bhutan (De Urioste/Goswami)
- Abrahamic Religious Interpretations in Japan (Salazar/Rosenbaum)
- A Multinational Perspective on Rural Healthcare (Vencill/Reiser Robbins/Nichols)
- Propaganda vs. Payoff: What are the Real Benefits of the Study Abroad Program? (Polly/Paul)
- Botswana: Man vs. Nature (Heiner/Galloway-Montesano)

Examples of a Competition-based Presentation

Report of academic-based competition completed: team or individual-based; application process; competition requirements; work done (teamwork); travel, and actual competition with results.

- JAMP and My Experience (T. Garcia/E. Winterbottom)
- Masonry Arch Competition: My Experience and It's Benefits (Pachicano/Bailey)
- The Power Mechanism and Preparation of the Cheme Car (Trebatoski/Alexander)

Examples of a Creative Arts

Art, theater, or music-based, either review of a professional piece, or detailed description of the creation of student's own works (decision, creative process, equipment/supplies needed, proof of finished product (visual or audio))

- The Development of Mentoring a Horn Quartet (P. Lopez/Sholtis)
- An Overview of the Chronology and History of the Trumpet (Perez/Milsap)
- Origins and Development of the Trombone Choir (Schmidt/Diaz)
- The Development of the Clarinet (Wright/Vos-Rochefort)
- Jazz: The Mother of Hip-Hop: How One Genre Inspired Another (Betancourt/Zinniger)
- Saxophone Repertoire (Navarro/Zinniger)