

UNIVERSITY HONORS AND UNDERGRADUATE RESEARCH PROGRAM (UHURP)

MENTOR INFORMATION

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UHURP Mentor Information

How Students Join the UHURP – Application and Acceptance Process

- Students complete an online application through the UHURP website: <u>APPLICATION FORM</u> (deadline: First day of class of each semester)
- Next, an academic background check is performed to ensure the student has the necessary credentials and has never had any academic issues, suspensions, etc. Once they pass the background check, they are conditionally admitted to the honors program.
- After admittance, their department representative contacts the student for an interview.
- The faculty representative will further vet the student and acquire more information about their experience, educational and career interests, etc. to help make the most beneficial mentor/student match.
- Once the mentor has been identified, the student and/or faculty representative will communicate the next steps to all affected parties.
- For information about the qualifications that students must meet to join the honors program, speak with your faculty representative, visit https://www.tamiu.edu/honors/UHPAdmissions.shtml, or send an email to honors@tamiu.edu.

What are Faculty's Roles and Responsibilities?

- The primary goal of the UHURP is reflected in our Mission Statement: The TAMIU Honors and Undergraduate Research Program seeks to provide TAMIU's best and brightest students with the opportunity to thrive and challenge themselves to their fullest potential. Honors students will work closely with their major's faculty mentor in research projects, conference presentations, leadership development, and community engagement.
- In essence, we want to help honors students develop the knowledge, skills, and experience to demonstrate their scholarly/professional potential while giving them greater opportunities for the future.
- As a mentor, you will guide the student to complete a project of significant scope and size that will add to the student's knowledge and skills, challenge them, and help with your career aspirations. Therefore, this project can be any discipline-appropriate project that you deem appropriate. Examples include, but are not limited to, a publishable manuscript, conference poster or presentation, novel product, experimental design, apparatus, etc.ⁱ
- You are only committed to working with a student for a semester and will evaluate their progress twice each term. Although we think it is best for all parties if a student works with the same faculty member during their time in the program, we recognize that this may not be possible. Therefore, if you decide that a partnership is not working, let your faculty representative know and she/he/they will make the necessary adjustments/changes.

Benefits of The Program

Benefits for You (Faculty)ii

- Funding for your work with students: \$500/student up to 3 students or \$1500/semester.
- Many faculty have reported greater motivation after seeing the increased success and drive of their students. Faculty experience the satisfaction of helping new scholars grow and learn and inspiring them to pursue graduate studies.
- Students of color and underrepresented groups like women/females in STEM bring novel perspectives and approaches to research questions, which can positively influence the direction of a scholarly or creative program.
- Promotes faculty professional development and can lead to projects that successfully integrate teaching, research, and service responsibilities, saving the faculty member time and effort. Serves as direct evidence of the integration of scholarship and teaching.

Benefits for Studentsⁱⁱⁱ

- Increased engagement, motivation, persistence, and retention, which are more prominent for students of color and underrepresented populations
- Increased interest in graduate school
- Increases in course grades, persistence in the major, and graduation rates
- Greater gains in mastering both content and contextual knowledge
- The ability to integrate theory and practice, and put classroom knowledge into practice
- Increased creativity, problem-solving, and critical-thinking skills
- Greater tolerance for and resilience through obstacles and challenges
- Improved self-confidence
- Clarification of their career path
- More competitive resume/CV for graduate studies or career path

Benefits for the Institutioniv

- Potential for more avenues to engage the community
- Serves as a valuable recruiting tool. A collaborative scholarly atmosphere attracts motivated students, talented and committed faculty and staff members, and devoted donors, which improves the overall health of the institution.
- Greater visibility and opportunity due to the flow of people from outside the university. Visits from business, industry, government, etc. leaders contribute to an enriched educational experience.
- Undergraduate research is an integral part of raising a university's Carnegie Classification
- A culture of undergraduate research brings intellectual vitality and promotes an engaged community between teacher scholars and student scholars.
- Undergraduate research may lead to a greater presence of alumni on campus for events, more significant contributions of time and monetary contributions to institutional programs and funding drives, and more enthusiasm to promote the institution and raise its visibility.

UHURP Administration

Alfredo Ramirez Jr. Ph.D. | Chair | Dean | KLM 416B | 956-326-2807

UHURP Faculty Representatives

- Daniel De la Miyar, Ph.D. | University College | KLM 419J | 956-326-2808
- Mohammad Davachi, Ph.D. | Biology & Chemistry | LBV-385 B | 956-326-3323
- Adam S. Kozaczka, Ph.D. Humanities | AIC 331 | 326-326-3300
- Brittany Hood, Ph.D. | Social Sciences | AIC 314 | 956-326-2687
- <u>Nicholas Hudson, Ed.D.</u> | Student Orientation, Leadership, and Engagement (SOLE) | Director | STC 224B | 956-326-2283
- Cody Perry, Ph.D. | COED | PLG 313G | 956-326-3143
- TBA | CNHS | CNS 304A | 956-326-2452
- <u>Jesse Shaw, M.F.A.</u> | Fine & Performing Arts | FPA 233C | 9856-326-2591
- Tariq Tashtoush, Ph.D. | Engineering | LBV 323 | 956-326-2600
- Desi Vásquez, Ph.D. | Psychology & Communication | AIC 328 | 956-326-3119
- Hongwei Wang, Ph.D. | Math & Physics | LBV 315 | 956-326-2413
- Yinghong Susan Wei, Ph.D. | ARSSB | WHT 219B | 956-326-2555

ⁱ When applicable, all IRB protocols should be followed

ii Erickson, 2001; Nickels, 2022; Office of the Vice President, n.d.; Office of Undergraduate Research and Creative Scholarship, 2022; Osborn & Karukstis, 2009; Petrella & Jung, 2008

iii Nickels, 2022; Office of the Vice President, n.d.; Office of Undergraduate Research and Creative Scholarship, 2022; Osborn & Karukstis, 2009; Petrella & Jung, 2008

iv Erickson, 2001; Nickels, 2022; Osborn & Karukstis, 2009; Petrella & Jung, 2008

Honors Mentor Support Information

Tips For all Mentors

- Develop a check-in system. Regularly scheduled calls and/or meetings allow students to report their progress, receive feedback, and seek direction.
- Give constructive feedback. Show students how they can improve or where they can find the information to improve. Provide clarity for the students and allow for second chances, revisions, etc.
- Encourage participation in the broader research community, and for students to engage with others across campus and the community.
- Keep yourself available and ensure students know the best times, and methods for contacting you.
- Prioritize safety, ethical behavior, etc.
- Remain flexible and attentive to student needs.

Tips for Mentors Working with Honors Apprentice

- Be understanding: First and second-year undergraduate students need longer turn-around times. This may be their first work experience and/or the first time they will encounter many aspects of research and higher education.
 - o Many students are also first-generation, so they may not have a support system that is familiar with academia and higher education.
- Take time to explain your research and projects to the student.
- Help students set timelines and deadlines and incorporate small, regular checkpoints along the way. Develop these timelines in collaboration with the student as they will be more likely to stick to dates that they helped to set.
- Utilize one-on-one meetings.
- Encourage exploration and collaboration.

Tips for Mentors Working with Honors Scholars

- Ask students regularly about their goals and progress with their research. This is a good opportunity
 to offer fewer checkpoints and hard deadlines to allow students to develop their own independent
 planning structure.
- Invite them to share what they have learned with other honors students or invite them to give presentations in your classroom.
- Encourage them to begin developing their portfolio and begin preparing for the next step in their education/career path.

Tips for Mentors Working with Honors Researchers

- Ask students about their goals and progress with their research.
- Encourage students to share their experiences and expertise with honors scholars and apprentices.
- As the final months of their time at TAMIU come to a close, many are overwhelmed with all of the additional events, requirements, family pressures, exams, fieldwork, etc., so remind students to plan accordingly and offer tips for managing their time, workload, and mental health.

University Honors and Undergraduate Research Program Levels

Upon acceptance into the Honors Programs, students will begin from the first level unless it's determined otherwise by the faculty representative:

Level 1: Honors Apprentice – Typically Reserved for Freshmen and Sophomore Honors Students. Students do not need to be mentored by a faculty in the discipline. Potential activities should include:

Pre-Research: Belmont Report/Completion of CITI Training, IRB process, writing conventions such as learning the applicable formatting and writing style (MLA, APA, Chicago, etc.), expectations of research writing, editing, revision, etc.

Learning About Research: Learning the foundations of research (design and methods, data collection, data analysis, etc.) based on the faculty mentor's agenda.

Conducting Prescribed Research: Identifying acceptable literature and conducting library searches/writing literature reviews, annotated bibliographies, etc. as the semester's deliverable.

Level 2: Honors Scholar – Typically Juniors or Seniors who have completed Level I and are ready to advance to developing more advanced research skills.

At this level, honors students learn to *apply* research skills from the Apprentice level and be mentored by faculty in the applicable discipline. Potential activities should include:

Learning about Research: Continue refining and improving work from the apprentice level, write sections of the IRB protocol, attend research conferences, serve as a judge of science fairs, symposia, etc., develop specialized knowledge of specific research design and methods, data collection/analysis, etc.

Conducting Bounded and/or Scaffolded Research: Organize and synthesize previously collected data, use publicly available datasets to contribute to the faculty mentor's research, begin to formulate a future independent project, or contribute more significantly to the faculty mentor's research agenda.

Level 3: Honors Researcher – Typically Junior and Senior Honors students who have shown extraordinary promise, time management, communication, and professionalism, and aspire to pursue or have applied to graduate schools. At this level, honors students carefully employ their research knowledge and skills with greater autonomy or on an independent research project under the mentorship of a faculty member. Potential activities include:

Learning about Research Development: Choose topics and methods to focus on, learn about formulating a research agenda unique in contributing to one's discipline, submit for publication as coauthors and present at conferences, etc.

Conducting Open-Ended and Unbounded Research: Write a complete IRB protocol, collect and analyze data for an independent project, present at state, regional, national, or international conferences, serve as a judge or peer-reviewer when possible, submit manuscripts for publication, be a significant contributor to research papers, etc.

Level 1: Honors Apprentice

Description and Characteristics

A student at the apprentice level is early in their academic career with no prior research experience (or very little). There is potential for significant growth and transformation through participation in the honors apprenticeship. Experience may serve as a gateway to future research.

In general, the honors apprentice should work toward understanding or engaging in the following:

- The definition, purpose, and characteristics of research
- Basic preliminary steps (Ethics, informed consent, IRB, etc.)
- Explore epistemology, ontology, and theory needed to conduct sound research
- Relevant research skills connected to the specific research method/discipline (i.e., Interviewing skills, survey coding, data entry, titration, calibration, etc.)
- Career development and professional learning
- Learning to build a research skill/product portfolio
- Other tasks related to research: Applying for grants, resolving conflict among collaborators, laws connected with international researcher collaboration, expectations of publishing, communicating effectively in discipline-specific ways, working effectively in large organizations, etc.

The following table explicates a selection of potential tasks the apprentice can complete as part of their work. However, the list is not exhaustive and faculty mentors should assign tasks as needed that align with faculty goals and honor student growth and learning.

Required Tasks	Other Potential Tasks/Activities
Read the Belmont Report	Watch/Review/Read Library Resources
Complete the applicable CITI Training Modules	Attend writing workshops
Complete a skills assessment as determined by the mentor(s)	Receive training in research communication skills
Other (as determined by the mentor):	Collect Abstracts and/or Literature for the faculty mentor
	Critique fellow students' work
	Learn to build a research skill/product portfolio
	Write book reviews
	Complete TAMIU Trailblazers Career Development and Global Perspective Learning Dimensions
	Collaborate with other honors students and graduate students
	Participate in professional development activities to prepare for graduate school and career success
	Engage in Community Service Related to the research area of interest (if possible)
	Present at the TAMIU Student Conference
	Attend conferences outside of TAMIU

Checklist of Demonstrated Behaviors Professionalism and Growth ☐ Consistently demonstrates professionalism ☐ Demonstrates commitment to assigned tasks ☐ Displays high standards of attendance and punctuality for meetings Demonstrates ethically responsible actions (protects privacy, models academic integrity, etc.) Demonstrates enthusiasm and curiosity, and seeks opportunities to improve and learn ☐ Demonstrates appropriate organizational skills **Communication and Collaboration** ☐ Reliable/dependable in accomplishing assigned tasks; Takes initiative ☐ Communicates appropriately with the faculty supervisor ☐ Accepts suggestions and constructive criticism ☐ Demonstrates effective time management skills **Discipline-Specific Performance** • Completes all required tasks, meeting the expectations of a research apprentice ☐ Completes all documentation consistently and accurately ☐ Interprets given information/data & synthesizes knowledge into prescribed formats ☐ Demonstrates technical/discipline-specific skills appropriate for a research apprentice **Overall Recommendation** ☐ Unsatisfactory (Pursue remediation to continue as an apprentice) ☐ Remain on the Apprenticeship Track ☐ Proceed to Student-Scholar ☐ Proceed to Independent Researcher Comments:

Faculty Signature:

Date:

Level 2: Honors Scholar

Description and Characteristics

A student at the student scholar level has some previous prior research experience and possesses many necessary skills for conducting simple research. There is potential for growth and transformation through participation in faculty-led/guided research. Experience may help the student refine research goals and interests. Although the student-scholar still needs guidance and support from the mentor, they can do so with less direction and assistance than a research apprentice.

In general, the student scholar should work on the following:

- Provide support to the faculty mentor
- Basic data management and/or analysis
- How to report and discuss study results
- Continue exploring epistemology and ontology
- Continued improvement of research skills connected to the specific research method/discipline (i.e., Interviewing skills, survey coding, data entry, titration, calibration, etc.)
- Start developing a research skill/product portfolio
- Continue work on grants, collaboration skills, expectations of publishing, peer-reviewing, etc.

The following table explicates a selection of potential tasks the student-scholar can complete as part of their work. However, the list is not exhaustive and mentors should assign tasks as needed that align with faculty goals and honor student growth and learning.

Required Tasks	Other Potential Activities/Tasks
Attend one or more writing workshops	Collect preliminary artifacts for a research skill/product portfolio
Apply to and/or present at the Pathways Student Research Symposium	Continue research communication skills training
Participate in professional development activities to prepare for graduate school and career success.	Finish all remaining TAMIU Trailblazer requirements
Other (as determined by the mentor):	Prepare for the GRE
	Critique fellow students' work
	Peer review for a small (regional/state) journal
	Write a grant proposal
	Write book reviews, literature reviews, meta-analyses, etc.
	Attend CV/Resume workshops, Write and revise the CV/Resume
	Engage in Community Service Related to the research area of interest (if possible)
	Attend and/or present at other regional or local conferences

Checklist of Demonstrated Behaviors Professionalism and Growth ☐ Consistently demonstrates professionalism ☐ Demonstrates commitment to assigned tasks ☐ Displays high standards of attendance and punctuality for meetings Demonstrates ethically responsible actions (protects privacy, models academic integrity, etc.) Demonstrates enthusiasm and curiosity, and seeks opportunities to improve and learn ☐ Demonstrates appropriate organizational skills **Communication and Collaboration** ☐ Reliable/dependable in accomplishing assigned tasks; Takes initiative ☐ Communicates appropriately with the faculty supervisor ☐ Accepts suggestions and constructive criticism ☐ Demonstrates effective time management skills **Discipline-Specific Performance** ☐ Completes all required tasks, meeting the expectations of a student scholar ☐ Completes all documentation consistently and accurately ☐ Collects and records appropriate information/data using the given methodology from pre-determined source/s where information/data is not obvious ☐ Evaluate sources/information/data using a choice of provided criteria to specify credibility ☐ Reflects on the research process ☐ Organizes information/data using a choice of given structures ☐ Interprets several sources of information/data and synthesizes them to integrate knowledge into standard formats ☐ Demonstrates technical/discipline-specific skills appropriate for a student scholar **Overall Recommendation** ☐ Unsatisfactory (Pursue remediation to continue as a student-scholar) ☐ Remain on the Student-Scholar Track ☐ Proceed to Independent Researcher Comments:

Faculty Signature:	Date:

Level 3: Honors Researcher

Description and Characteristics

A student at the independent research level has prior research experiences and/or is working on a project that is a continuation of research in which the student is already engaged. At this level, many of the basic expectations and skills of research have been demonstrated. Students at this level will need much less supervision but have not yet reached the research skill level of a graduate student.

In general, the student scholar should work on the following:

- Choose a sustainable, professionally appropriate research topic
- Continue creating and improving their portfolio
- Prepare for the next career and/or educational steps (GRE, job applications, interview skills, etc.)
- Continue professional development, writing skills improvement, grant writing, etc.

The following table explicates a selection of potential tasks the independent researcher can complete as part of their work. However, the list is not exhaustive and mentors should assign tasks as needed that align with faculty goals and honor student growth and learning.

Required Tasks	Other Potential Tasks/Activities
Apply to graduate school, career avenues	Lead writing and research skills workshops for new honors students
Apply to and/or present at the Pathways Student Research Symposium	Complete the research skill/product portfolio
Participate in professional development activities to prepare for graduate school and career success	Prepare for/Take the GRE
Other (as determined by the mentor):	Collaborate with other honors students and graduate students
	Write grant proposals, meta-analyses, original research manuscripts, etc.
	Submit for publication
	Peer review for a journal, conference, etc.
	Write and revise the CV/Resume
	Mock Interviews
	Engage in Community Service Related to the research area of interest (if possible)
	Present at conferences, including national and international offerings

Checklist of Demonstrated Behaviors

Prote	essionalism and Growth
	Consistently demonstrates professionalism
	Demonstrates commitment to assigned tasks
	Displays high standards of attendance and punctuality for meetings
	Demonstrates ethically responsible actions (protects privacy, models academic integrity, etc.)
	Demonstrates enthusiasm and curiosity, and seeks opportunities to improve and learn
	Demonstrates appropriate organizational skills

Co	ommunication and Collaboration
	Reliable/dependable in accomplishing assigned tasks; Takes initiative
	Communicates appropriately with the faculty supervisor
	Accepts suggestions and constructive criticism
	Demonstrates effective time management skills
Di	scipline-Specific Performance
	Completes all required tasks, meeting the expectations of an independent researcher
	Completes all documentation consistently and accurately
	Collects and records appropriate information/data from self-selected sources using one of several
	provided methodologies and/or collects and records self-determined information/data choosing an
	appropriate methodology based on the parameters set.
	Evaluates sources/information/data and the inquiry process using criteria related to the aims of the
	research.
	Reflects insightfully to improve their own and/or others' research processes
	inquiry processes within the parameters set.
	Analyzes trends in information/data to synthesize and integrate components and fill knowledge gaps that
	are stated by others.
	Uses discipline-specific language to demonstrate scholarly understanding for a specified audience.
	Applies the knowledge developed to diverse contexts
Over	all Recommendation
	Unsatisfactory (Pursue remediation to continue as an independent researcher)
	Remain on the Independent Track
	N/A – Student graduated/finished the program
	Comments:
Facult	ry Signature: Date: