The Ins and Outs of Undergraduate Research and Leadership: A Student's Perspective

A Research Honors Senior Project
Presented to
the Faculty of the Department of Kinesiology and Public Health
California Polytechnic State University, San Luis Obispo

In Partial Fulfillment
of the Requirements for the
Bachelor of Science Degree in Kinesiology

By
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Student

Supervised By
Dr. Jafrā D. Thomas
Senior Project Faculty Advisor

December 2022

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Acknowledgments

The completion of this unique senior project, and therefore the manuscript draft and study recruitment design would not have been possible without the unwavering support of Dr. Thomas through all of the unexpected challenges. His continual ability to move forward with careful thought and time spent doing things the proper way has allowed me to drastically improve my research and leadership skills. I am incredibly grateful for his belief in me and my skills, and for encouraging me to take on an even stronger leadership role through this project. I am incredibly grateful to my lab fellows Jasmine Wong and Ethan (Yi Sheng) Wu for handling their components with such skill and their ability to adapt as we gained new information. I am also incredibly grateful to the following KPH Department Staff Members, Katie Hyland, Emily Kelly, and Eric Benson, for their logistical and administrative assistance. Finally, I want to thank the Frost Foundation and Southwest Chapter of the American College of Sports Medicine (SWACSM) for funding support. This project was supported by the William and Linda Frost Fund (College of Science & Mathematics, Cal Poly, San Luis Obispo), in the form of a Frost Undergraduate Student Research Award, which I and the previously named lab fellows in relation to this senior project, received (2022 Spring Quarter, 2022 Summer Term). Additionally, I received a 2022 SWACSM Student Travel Grant to present a milestone of this project, the study titled, “Evaluating Research Survey Websites in Kinesiology: A Case Study Using an Accessibility Rating Form,” at the Chapter’s Annual Meeting (October 28-29, 2022, Costa Mesa, California, co-presenters: Jasmine Wong and Ethan [Yi Sheng] Wu).
Abstract

This manuscript is a reflective write-up of Regina Hockert’s experience in completing KINE 462, Honors Kinesiology Senior Project, during the 2022 Fall Quarter. It describes their experience as an undergraduate research leader, including specific milestones and artifacts related to a broader replication study and the daily activities of Dr. Jafra Thomas’ lab. This essay was designed to be a written reflection around their senior project presentation and the insights shared through that medium about the senior project experience. It is created to showcase lessons learned in relationship with the tasks and responsibilities required of working in-depth on student-led research. There are a series of appendices to this manuscript that include images, documents, and other artifacts that were collected and analyzed for the end-of-course presentation. This essay mirrors that presentation. Specifically, it focuses on three main milestones of (a) turning a literature review into a manuscript, (b) creating a recruitment sign-up form, and (c) creating recruitment tabling material to sign up participants for the broader replication study. The overarching goal of this essay submission was to provide information on the inner workings of a senior project and student research, as well as personal insight into challenges and skills developed through unexpected hurdles whilst working on the components of the senior project experience. This information contained within the insights presented can be used to advise the creation of future senior projects, assist in designing student-led research experiences, and allow people to become familiar with how student-led research may unfold.

Keywords: case study, higher education kinesiology, high impact teaching practices, lived experience, scholarship of teaching and learning (SoTL), undergraduate research
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Introduction

For my honors senior project, I chose to focus on exploring my leadership role in Dr. Thomas’ lab through working with my two lab fellows, Jasmine Wong and Ethan (Yi Sheng) Wu. I did this through working on tasks around a broader replication study (Vega et al., 2021). Progress made toward implementing the broader replication study is captured by the three main milestones of my senior project experience, which I focused on in my project presentation (Hockert, 2022) and its full write-up (the present manuscript). Those milestones reported on here are (a) turning a literature review into a manuscript, (b) creating a recruitment sign-up form, and (c) creating recruitment tabling material to sign up participants for a replication study. This manuscript develops on my oral senior project presentation, creating a written document of my reflections and insights through this process. Additionally, and in a similar vein to previous reports whereby undergraduates reflectively analyzed their research-related experiences (e.g., Kamp & Thomas, 2022, Smith et al., 2022), this write-up reports on my own reflective analysis to my senior project experience, from which I provide advice for both students and faculty involved in collaborative scholarly activities, including research (Balido et al., 2022; Thomas et al., 2022a). Through this essay, I also provide concepts learned about leadership and ways you, the reader, could apply them to support those whom you mentor, supervise, or otherwise work with (Thomas et al., 2022b). My goal was to provide useful information for those in research and planning senior projects, as well as advise those, in or considering, leadership positions on how to deal with unexpected situations.
Discussion

My senior project ties into an ongoing replication study that Dr. Thomas’ lab is doing to replicate the 1995 Cardinal and Seidler study titled, “Readability and Comprehensibility of the ‘Exercise Lite’ Brochure,” which we are updating for more modern methods (Vega et al., 2021). This work is done to improve the quality of health communication with the public and thus their quality of life through access to actionable information. I first got involved with Dr. Thomas’ research in 2020 because as a disability advocate, I was fascinated with the work he is doing on plain language communication and accessible health information (Thomas & Cardinal, 2020; Uwadiale & Thomas, 2020). I got involved in his lab because I wanted to make a positive impact on people’s quality of life. I worked alongside other undergraduate lab fellows new to the project until I gained enough knowledge and experience to begin taking on projects of my own (Love et al., 2021; Hockert et al., 2021a,c), eventually arriving at a point where I could helped train new lab fellows in the methodology of the study and coordinate tabling for its recruitment phase, which began midway through the 2022 Fall Quarter. This new leadership role within Dr. Thomas’ lab began at the start of the 2022 Spring Quarter at the end of March, and has continued to the present date which this essay was submitted (i.e., March to December of 2022). My new leadership role is ongoing and is expected to conclude at the end of the 2023 Spring Quarter in June.

My senior project had an extensive planning phase that started during the summer of 2022, which eventually turned into a seven-page contract with a weekly timeline, detailed personal learning objectives, and explicit expectations of both me and my mentor Dr. Thomas (Appendix A). While the learning objectives and milestones are extensive, this reflection will
only focus on three that I found to shape my experience substantially. The first is turning the literature review I did in 2021 (see Hockert et al., 2021b) into a manuscript with Jasmine Wong’s help as lead author, and Ethan (Yi Sheng) Wu’s help as proof editor of the drafts we produced. The second milestone was using plain language communication techniques to create a comprehensible recruitment sign-up sheet (see Appendix B, for further reference see Thomas et al., 2021; Table 5, p. 161). Finally, the third milestone was making physical recruitment materials to display as we tabled around campus to get people to sign up (Appendix C).

![Three Major Milestones](image)

**Figure 1.** Illustration from presentation of the three milestones reported on (Hockert, 2022).
Milestone 1 Manuscript Insights

For the manuscript, I learned a great deal about how to emphasize and utilize scientific transparency and the challenges that occur with those rigorous processes (Watson & Thomas, 2021). We went through many rounds of edits, reviewed research, clarifying gaps in procedure, and back-and-forth consensus to even create our first full draft of this manuscript in June of 2022. I worked very closely with Jasmine Wong, and through this, I was able to develop my leadership ability to provide context to what we are doing now through our past research. As Jasmine was not a part of the lab when I conducted the initial literature review, there were many decisions and pieces of information that she was not involved with. This forced me to improve my ability to convey information and reasoning to her, as well as provide in-depth background as to challenges that influenced our decision to do a rapid review instead of a systematic review and so on (this was mainly due to a lack of people and a lack of time). I also learned the importance of patience and editing something countless times to ensure its quality and transparency. I have never made this many edits to one document, nor gone back and forth between writing and rechecking research this many times for any project. At the time this essay was submitted, the literature manuscript was revised at least nine times between June and November of 2022. However, through this, I learned the importance of slow meticulous work to create a solid foundation of science which future work can be built upon. The latest draft of the manuscript was submitted to Dr. Thomas for further review for approval on November 10, 2022.
Milestone 2 and 3 Recruitment Insights

The recruitment sign-up form (Milestone 2) and tabling materials (Milestone 3) for the replication study both tie into participant recruitment. Working on these materials required me to improve my lay communication and plain language skills (which involve using everyday words to explain concepts, keeping one topic per paragraph, and avoiding technical jargon; Warde et al., 2018). The recruitment sign-up form proved challenging because upon its completion, Cal Poly’s Internal Review Board (IRB), determined it needed further review, which unfortunately delayed our tabling and recruitment plans for two weeks. Ultimately, no edits were requested by Cal Poly’s IRB. As our recruitment was initially planned for a 10-week quarter, this required a drastic shifting of plans. As a leader, I had to find ways to keep our lab moving forward and making meaningful progress without that key component, as well as handle canceling scheduling, coordinating the pausing of tabling materials, and keeping everyone as updated as possible. The main component we shifted to during this time was editing our recruitment materials, which were two large poster boards with printed and handwritten information, and was the third milestone of this project. My lab fellows had many great ideas to gain the interest of passers-by, however, keeping this material non-biased by IRB standards was incredibly challenging. I had to turn down countless ideas that suggested promoting health literacy and comprehension because even that can be viewed as biased and potentially skew our eventual study results, mainly by possibly instilling positive or negative attitudes towards physical activity promotion material in circulation to the public (e.g., online tutorial or advice article; for further discussion, see the webpage by Iowa State University, n.d.).
Providing guidance and encouragement to those I was directing proved very difficult, as I had to attempt to give them autonomy while following the strict regulations of the IRB.

**Academic Conference Insights**

In addition to these senior project milestones highlighted, I had the opportunity to co-lead a “spin-off” project to Milestone 2, which was co-authoring the poster titled, “Evaluating Research Survey Websites in kinesiology: A Case Study Using an Accessibility Rating Form” (Wu et al., 2022a). The knowledge and experiences I gained working with plain language techniques to create the replication study sign-up form was translated into introducing the form for rating accessibility created that summer (2022) to attendees at a regional kinesiology conference in the fall of that same year (i.e., the Southwest American College of Sports Medicine Chapter Meeting, October 28-29, 2022, Costa Mesa, California). Working on the poster involved helping to test the accessibility rating form’s reliability (Wu et al., 2022b), assisting in the design of the poster to present and discuss our results, traveling to the conference, presenting the work, and interacting with other professionals and students in the field around the topics of the rating form. I learned a great deal about how to convey our research insights and purpose in concise and interesting terms that explain the content with scientific rigor without the audience needing an educational background in our specific project. This ties into my personal learning objective of being able to effectively convey our scientific research to all audiences. As a leader, I also practiced engaging with my fellow undergraduate lab fellows on the specific things they were learning and gaining from the conference, as well as sharing my own knowledge about how to navigate an academic conference based on my previous experiences (e.g., Hockert et al., 2021b; Vega et al., 2021).
Recommendations for Students and Faculty

From all of the knowledge I gained over the course of this project, I learned lessons that I will use for the rest of my life and I hope others can use them as well. For students, I want you to know that saying yes to research work will lead you to places you never expected and give you opportunities you never thought were possible. It is okay to feel underprepared if you are providing your attention, willingness to learn, and unique insights. Flexibility and adaptability are some of the most important skills for you to develop, work to not let unexpected challenges derail your progress, things can always be fixed. In addition to your work, remember that taking care of yourself is required to be a fully functioning person. You deserve to have time to yourself. For faculty, remember that your students have more on their plates than just research or academics; there are countless things they are handling without your knowledge. After my senior project presentation from an anonymous feedback survey, a faculty member mentioned the importance of preparing your students by gauging their expectations for things they have never done before. This was an insight they gained from the knowledge shared in the presentation, and I hope that others can continue to build on that faculty member’s suggestion and the other ideas shared here. Another thing faculty can do is to keep providing consistent positive feedback to guide students as they become fully-fledged researchers. Know that your students are passionate and trying their best even when mistakes happen and things fall through the cracks, it is not from a lack of effort. For everyone, be adaptable and kind to yourselves and each other through research. It can be incredibly stressful and challenging, but the work we are doing is needed and contributes to a better society.
Conclusion

The purpose of this senior project was to expand upon the research that I have been involved in, step further into leadership, and share the knowledge and insights I have gained with others. Throughout this senior project and leadership experience, I learned a great deal about the importance of flexibility and being able to adapt to unexpected circumstances. Without being able to make quick decisions and pivot focus it is very easy to fall behind or become discouraged. Through all of these unexpected things, having a leadership position provides extra responsibility and requires you to not only deal with the circumstances yourself but also be able to assign tasks and give information to those working under you, even if you do not have extensive information yourself. However, as a leader, you are working in partnership with those under you. Through this process, I learned that while you may be assigning tasks and providing information, you are also learning from those you lead, and it is your responsibility to assist them. Undertaking student research can be an incredibly rewarding and taxing experience, so while you handle all of the complex research components, you still matter and deserve care as a person. Finding balance between your academics, research, and personal life is challenging but necessary to be able to truly help others and contribute your best version of your work. Moving forward, I hope others can use this information and these insights to create positive student research experiences, improve their leadership skills, and contribute to our body of scientific knowledge in meaningful and transparent ways.
References


https://doi.org/10.2466/pms.1995.80.2.399


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Hockert, R. F., Thomas, J. D., Cutner, E. L., & Vega, R. A. M. (2021b). Direct measure of how well end-users understand physical activity promotion material: A road less traveled in kinesiology: Preliminary findings of a rapid systematic review [Abstract]. *Western Society*
for Kinesiology & Wellness 66th Annual Conference Program, 19. Virtual Conference:

Western Society for Kinesiology & Wellness. [https://www.wskw.org/past-conferences/](https://www.wskw.org/past-conferences/)

Hockert, R. F., Yeh, E., Lemucchi, D., Greene, M., Burke, S., Clemens, M., McIntyre, A. M., White, M., Reliford, J., Dizon, I, Wheelock, E., Abdulkhaliq, R., Salazar, T. (2021c, April 7). In V. R. Yingling (Moderator) and J. D. Thomas (Moderator), Session #5: Graphic design for quality lay material: A case analysis [Slideshow presentation and discussion]. Joint-Session Presentation between Dr. Jafrā D. Thomas’ Research Lab (Department of Kinesiology and Public Health, California Polytechnic State University, San Luis Obispo) and the Class, KIN 606 -- Current Trends in Kinesiology: Myth Busters (Department of Kinesiology, California State University, Eastbay). Virtual event.


Love, B. C., McIntyre, A. M., Hockert, R. F., Watson, N. M., & Thomas, J. D. (2021, March 3). Updates from Dr. Thomas’ lab: Milestones and lessons learned [Slideshow presentation]. A guest presentation in the graduate level course, KIN 606 -- Current Trends in
Kinesiology: Myth Busters. Department of Kinesiology, California State University, Eastbay. Virtual event.


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https://journals.lww.com/acsm-msse/Fulltext/2022/09002/Understanding_And_Communicating_Physical_Activity.989.aspx


http://www.jaspe.ac.me/?sekcija=article&artid=200


*Evaluating research survey websites in kinesiology: A case study using an accessibility rating form* [Poster presentation]. The 42nd Annual Meeting of the Southwest Regional Chapter of the American College of Sports Medicine. Costa Mesa, California.

https://digitalcommons.wku.edu/ijesab/vol14/iss2/184/

Appendices

Appendix A: Senior Project Contract

Fall 2022 Senior Project
Department of Kinesiology and Public Health

Student Information:
Full Name: Regina F. Hockert
Cal Poly Email Address: rhockert@calpoly.edu

Faculty Supervisor Information:
Faculty Name: Jafra D. Thomas
Cal Poly Email Address: jthoma84@calpoly.edu

Enrollment Information:
Select: KINE 462
Number of units: 1 Unit
Quarter of enrollment: Fall 2022

Project Description:
This project entails creating material for the active recruitment of participants to a replication study, tabling for recruitment, and organizing and processing data of the recruitment. This project will include taking previously done pilot testing and procedures to create a methods section for an academic manuscript. This project will also require attendance to regular lab activities, providing leadership to fellow research assistants, and planning for future data collection and analysis. After completing of the project, there will be a presentation to fellow faculty and staff about key information and knowledge gained from the experience, along with a written reflection.

Start Date: August 4th, 2022
Send Date: December 9th, 2022
Total hours to be completed: 30 hours

University Senior Project Requirements
A. commence when, or after, a student has earned senior standing, though completion of preparatory courses and/or research may precede senior standing;
B. serve as a bridge from the college experience to professional/postgraduate readiness;
C. include clearly defined student learning outcomes that are aligned with program learning objectives;
D. have faculty oversight with scheduled meetings for which specific timelines/outcomes are defined;
E. include a formal proposal and/or statement of intent to be submitted to the faculty advisor;
F. involve inquiry, analysis, evaluation, and creation;
G. demonstrate core competencies in critical thinking, written and/or oral communication, information literacy, and quantitative and/or qualitative reasoning;
H. require a process/production and culminate in a final product as defined at the program level;
I. include an explicit element of self-reflection;
J. adhere to discipline-specific norms of academic integrity and ethical practices;
K. be individually and formally assessed;
L. include a minimum count of 3 units, or 90 hours of work (1 unit and 30 hours per KINE 462 requirements), with no maximum;
M. take no more than three quarters to complete;
N. be assigned grades consistent with Cal Poly’s grading policy.

To be completed by 9/19/2022:
• Finalize project timeline and workflow
• Complete project contract and expectations
• Link specific goals to course requirements, to degree program, to broad university requirements.
• Coordinate materials for tabling with Eric Bension and Emily Kelly
• Draft recruitment poster
• Get the signup sheet finalized

*This timeline is subject to change due to scheduling and unexpected obstacles*
Approved changes are noted in parentheses due to changing circumstances

<table>
<thead>
<tr>
<th>Project Timeline</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milestones &amp; Checkpoints</td>
<td>Fall quarter week 1. 9/19-9/23</td>
</tr>
<tr>
<td>• Finalize learning objectives (done)</td>
<td></td>
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<tr>
<td>• Organize all the tabling materials and make sure we have access to them (coordinated with Emily)</td>
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<tr>
<td>• Send lab mates a tabling schedule to sign up for (done)</td>
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<tr>
<td>Task</td>
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<td>----------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Get recruitment materials printed and poster printed (pushed into next week, working on organizing and gathering things)</td>
<td>Fall quarter week 2. 9/26-9/30</td>
</tr>
<tr>
<td>Meet with Dr. Thomas 9/22</td>
<td></td>
</tr>
<tr>
<td>Review the manuscript with Jasmine (done)</td>
<td>Fall quarter week 3. 10/3-10/7</td>
</tr>
<tr>
<td>Plan out map of location and time for recruitment tabling (putting together form to request space and organize this)</td>
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<tr>
<td>Create document on how other lab mates should access the materials for recruitment (done)</td>
<td></td>
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<tr>
<td>Meet with Dr. Thomas 9/29</td>
<td></td>
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<tr>
<td>Plan out map of location and time for recruitment tabling (putting together form to request space and organize this)</td>
<td></td>
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<tr>
<td>Create document on how other lab mates should access the materials for recruitment (done)</td>
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<tr>
<td>Meet with Dr. Thomas 9/29</td>
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<tr>
<td>Create document on how other lab mates should access the materials for recruitment (done)</td>
<td></td>
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<tr>
<td>Meet with Dr. Thomas 9/29</td>
<td></td>
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<tr>
<td>Edit manuscript with Jasmine and provide insight (done)</td>
<td></td>
</tr>
<tr>
<td>Start tabling (pushed back as we wait for form to be approved, organizing materials and getting them approved in the meantime)</td>
<td></td>
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<tr>
<td>Meet with Dr. Thomas 10/6 (changed to 10/4 due to conference)</td>
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<tr>
<td>Begin creating material for senior presentation (done)</td>
<td></td>
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<tr>
<td>Finalize date and time of presentation, reserve space for presentation (ask Kate Highland about this, space for 10-15 people)(done).</td>
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<tr>
<td>Meet with Dr. Thomas 10/13</td>
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<tr>
<td>Meet with jasmine about manuscript and go over edits, write list of things to ask Dr. Thomas to clarify (done)</td>
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<tr>
<td>Create advertising for senior project presentation, Instagram post, things to be sent out to professors or KPH (done)</td>
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<tr>
<td>Help Ethan work on SWACSM poster (done)</td>
<td></td>
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<tr>
<td>Tabling (pushed back for IRB approval)</td>
<td>Fall quarter week 4. 10/10-10/14</td>
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<tr>
<td>Finalize tabling recruitment information (done)</td>
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<tr>
<td>Meet with Dr. Thomas 10/13</td>
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<tr>
<td>Meet with jasmine about manuscript and go over edits, write list of things to ask Dr. Thomas to clarify (done)</td>
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<tr>
<td>Create advertising for senior project presentation, Instagram post, things to be sent out to professors or KPH (done)</td>
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<tr>
<td>Help Ethan work on SWACSM poster (done)</td>
<td></td>
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<tr>
<td>Tabling (pushed back again)</td>
<td>Fall quarter week 5. 10/17-10/21</td>
</tr>
<tr>
<td>Meet with Dr. Thomas 10/20</td>
<td></td>
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<tr>
<td>Writing and review manuscript before sending to Dr. Thomas, work on brief acknowledgement statement. (Done)</td>
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<tr>
<td>Create interactive components for senior project presentation (lay communication activity, ask them about thoughts on things I have undertaken) (done)</td>
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</table>
**THE INS AND OUTS OF UNDERGRADUATE RESEARCH**

- Reach out to KPH and friends about senior presentation (reached out to friends and family!, getting flyers made) (done)
- Helping edit and develop the conference poster with Ethan (formatting, consistency) (done)

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<td>Fall quarter week 6. 10/24-10/28</td>
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<tr>
<td>Meet with Dr. Thomas 10/27 (cancelled for conference)</td>
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<tr>
<td>Draft flow of presentation and order of slides (done)</td>
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<tr>
<td>Create slides for Senior presentation and speaking points (done)</td>
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<tr>
<td>Conference (SWACSM)</td>
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<td>Tabling (Not approved), working on talking points and finalizing tabling material</td>
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<td>Fall quarter week 7. 10/31-11/4</td>
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<tr>
<td>Meet with Dr. Thomas 11/3</td>
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<tr>
<td>add to manuscript, review and submit to Dr. Thomas (done)</td>
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<tr>
<td>Practice presentation with Dr. Thomas, friends, or lab mates (done)</td>
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<td>Send reminder about presentation (done)</td>
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<td>Tabling (pushed back again)</td>
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<td>Fall quarter week 8. 11/7-11/11</td>
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<tr>
<td>Meet with Dr. Thomas 11/10</td>
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<tr>
<td>Gather any last minute materials for presentation (done)</td>
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<tr>
<td><strong>Do Presentation for faculty and community (done)</strong></td>
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<tr>
<td>Tabling (done)</td>
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<td>Fall quarter week 9. 11/14-11/18</td>
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<tr>
<td>Meet with Dr. Thomas 11/17</td>
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<tr>
<td>Draft reflection (done)</td>
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<tbody>
<tr>
<td>Send Dr. Thomas reflection draft to provide feedback (done)</td>
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<td>Fall quarter Thanksgiving break 11/21-11/25</td>
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<tr>
<td>Finalize reflection of senior project and send to Dr. Thomas (done)</td>
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<td>Fall quarter week 10. 11/28-12/2</td>
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<td>Take care any final things that need to be done (done)</td>
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**Celebrate and relax**
- Final meeting and evaluation (done)

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<th>Task</th>
<th>Status</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Fall quarter week 11 (finals week) 12/5-12/9</td>
</tr>
</tbody>
</table>

**Project Components:**

1. Recruitment of study participants
   - Planning and implementing recruitment strategies.
   - Tabling, creating recruitment materials, and organizing people to assist in recruitment
   - Achieved 11/15
All materials collected and organized, plans coordinated with Emily Kelly for regular delivery of tabling equipment, lab fellow schedule completed and reminders set.

2. Conversion of literature review into a Manuscript
   - Achieved 11/16*
     - Manuscript has been created, but is still being finalized through Dr. Thomas’ edits

3. Dissemination of experiential learning
   - Practice sharing information of skills I have learned and growth I experienced because of these activities
   - Present this information to professors and the broader student body
   - Achieved 11/10
     - Senior Project presentation completed

4. Data management
   - Organizing and processing data from recruitment into a usable format and getting people set up to participate in study during Winter Quarter
   - In progress
     - Due to delay in recruitment because of further IRB review, substantial data has not been collected. Data base is being updated from pilot testing and information will be entered started Winter Quarter.

5. Coordination of fellow assistant researchers
   - Provide schedules for tabling, organize tasks, and provide guidance to fellow researchers
   - Achieved 12/2
     - Regular Fall quarter lab activities are completed

6. Attend to ongoing activities of lab
   - Attend regular meetings, ensure that tasks of the lab are being met, provide bigger picture ideas and guidance on how to keep moving forward
   - Create material for and attend any academic conferences
   - Achieved 12/2
     - Regular Fall quarter lab meetings are completed

Learning Objectives

<table>
<thead>
<tr>
<th>Table presenting learning objectives and faculty evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student-Identified Learning Objectives</strong></td>
</tr>
<tr>
<td>Develop my argumentative writing and transparency of research through converting material of multiple forms into a</td>
</tr>
<tr>
<td><strong>1.</strong> Manuscript and supporting why comprehension of physical activity material affects health literacy and relates to health treatment and outcomes.</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>5.</strong> Grow leadership skills in a research context, improve effective decisions making, improve my ability to concisely share information and tasks in both written and verbal forms.</td>
</tr>
<tr>
<td><strong>7.</strong> Improve my ability to distill our important research concepts to share with lay people, including recruitment participants using the principles of lay communication with a focus on accessibility and inclusion. Advance my ability to connect our research to interdisciplinary views, tie in the physiological benefits of physical activity, and why the comprehension component is important in relation to the actual physiological components.</td>
</tr>
<tr>
<td>Improve my ability to create, organize, and process information about the study, how it relates to physical activity, and how to create comprehensible physical activity programs and suggestions. Organize information collected and created in usable forms with forethought of how it will need to be used in the future.</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Continue to develop my skills of sharing personal and professional insights with a broad audience, connect concepts to other fields, and making ideas for future learning and expansion of this research.</td>
</tr>
</tbody>
</table>

**Expectations for Communication & Conduct**

**General Expectations:**
- Faculty oversight with regular weekly check-ins on progress, questions, and any issues. Planned beforehand and any scheduling changes are communicated.
- Regular communication through multiple forms, such as emails, text messages, zoom meetings, and face to face meetings.
- Materials are shared regularly and kept in places where they can be easily accessed.

**Mentor Specific Expectations:**
- Share relevant academic and professional growth opportunities
- Provide resources and guidance to the student to clarify tasks and streamline processes
- Be aware of senior project requirements and make the student aware of specific requirements and their timeline.
- Share presentation information with other faculty and students to help grow attendance.

**Mentee Specific Expectations:**
- Record time spent on project (minimum of 30 hours of work per unit of enrollment).
- Keep all materials created organized and in easily accessible places.
- Continue to take leadership role in the lab and in the current ongoing research.
- Create and give an oral presentation on the experience of the senior project to faculty and peers.
- Submit the final product to the advisor to be added to the KPH Senior Project Repository
- After completion of project, write a 500-1,000 word reflection on the experience working on the project.
- Fulfill the agreed-upon requirements of the project as discussed between the student and advisor.
- Stay mindful of accessibility, inclusion, and diversity when creating materials, talking to students and faculty, and writing the manuscript

**Evaluation**

In accordance with the Cal Poly University Senior Project Requirements, an evaluation will be consistent with Cal Poly's grading policy.

- Full completion of all the above tasks by their respective due dates or discussion of changing due dates due to unexpected circumstances: A
- Completion of all of the above tasks past due dates without informing advisor or some incomplete assignments: B
- Partial completion of tasks: C
- Partial completion of tasks and poor performance: D
- No work: F

__________________________________________
Faculty Mentor

__________________________________________
Student Research Assistant
Appendix B: Participant Sign-up Form

Sign-Up Sheet for Student Led Research

Our study goal is to measure comprehension of physical activity promotional material

For Staff to Complete:

ID Number: ___________________________
Date of Data Collection: _________________
Processed by: _________________________

1. What is your name (first and last)?

________________________________________________________________

2. What is your university email address? For example jt@calpoly.edu

________________________________________________________________

3. What is your current mailing address? (the place you receive your physical mail during the academic year)

________________________________________________________________

4. What is your current academic standing? Check the box that best describes you

☐ 1st year
☐ 2nd year
☐ 3rd year
☐ 4th year
☐ 5th year and beyond
☐ Graduate student
5. What is your major?

6. Have you earned a college degree? Check the box(es) that best describes you
   - □ Associate’s degree
   - □ Bachelor’s degree
   - □ Graduate degree

7. How old are you?

8. What is your gender identity? Select all that apply
   - □ Woman
   - □ Man
   - □ Fluid/non-binary
   - □ Other ____________

9. What are your pronouns? Select all that apply
   - □ He/him
   - □ She/her
   - □ They/them
   - □ Other ____________

10. In the last months, have you searched online or by other means for advice about exercise or dieting?
    - □ Yes
    - □ No

11. Have you ever taken a kinesiology or exercise science course? If so, what was it called?

12. On a weekly basis how often do you look up information on exercise, fitness training or nutrition?
    - □ Never
    - □ Once a week
    - □ Two- four times a week
    - □ Five or more times a week
Appendix C: Recruitment Tabling Materials
Experiential Research
Senior Project Presentation

The Ins and Outs of Undergraduate Research and Leadership: A Student's Perspective

Come learn about health comprehension research and personal experiences of being an undergraduate research project leader!

November 10th
12:10–1:00PM
43A-458