

Sabbatical Leave Report

A. Applicant

Name: Dr. AC Panella

Department: Communication Studies

Type of Leave: Project

Leave Dates: Spring 2024 and Fall 2024

B. Purpose of Leave

I researched and developed curriculum centered around museum and gallery spaces. This research was done with the intent to develop materials to support museum pedagogy across disciplines and create a series of professional development trainings in partnership with the campus museum and gallery spaces. The goal of this type of storytelling is to include visual thinking strategies and pedagogies to help students expand the ways they see themselves as storytellers beyond traditional performance techniques.

C. Objectives

Objective #1: Conducted research on the ways university and community college museum and gallery spaces are used.

Objective #2: Developed trainings and curriculum using museum and gallery spaces across disciplines.

Objective #3: Held a training on museum pedagogy across the curriculum

D. Narrative

Objective #1: Conducted research on the ways university and community college museum and gallery spaces are used.

- A. During Spring 2024, I visited and conducted interviews with museum educators and faculty that work with their campus gallery and museum spaces including Modesto Junior College, Fresno City College, Pasadena City College, Cypress College, East LA College, The Hammer Museum, and the Oakland Museum of California.
- B. I took courses through LACMA on social justice and museums and the Smithsonian courses on Interdisciplinary Teaching and Critical Art.
- C. I was certificated in Visual Thinking Strategies
- D. I completed an educational volunteer training at the Oakland Museum of California.
- E. Read a variety of books, articles, and web resources. See appendix A

Objective #2: Develop trainings and curriculum using museum and gallery spaces across disciplines.

- A. Developed a draft workbook to accompany future Community of Practice. See appendix B
- B. Wrote supporting article for training. See appendix C

Objective #3: Held a training on museum pedagogy across the curriculum

- A. Planned a training to be held at Spring 2025 PDA Day in the SRJC Museum.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

Upon returning to campus, it has been clear that I have a rested and energized brain for connecting and working with my students and peers. Having been a full-time faculty member for almost 17 years and never having a sabbatical, having unrestricted time to dedicate to professional development allowed me to not just work on this project but also spend dedicated and immersive time to learn Spanish, consult on a prison art education project, travel to and collaborate with archivists and artists in Central and South America, and revisit my own classroom practices. I have been incorporating visual thinking strategies into my classroom curriculum and next Fall I'll be able to have a more integrated approach across my curriculum. I am so incredibly grateful to have this time.

2. How did this sabbatical leave benefit students in my discipline?

Communication studies is an interdisciplinary discipline that includes media, journalism, film, rhetoric, performance, and a variety of interpersonal communication contexts. All too

often, it is easy for the discipline to be divided into visual studies and human communication. This project bridged that divide by connecting visual and material culture to verbal communication practices. Additionally, this project has helped to connect students to the wide variety of campus resources and encouraged practical application of course information.

3. How did this sabbatical leave benefit my department?

This sabbatical project has benefited my department in three ways. First, it has expanded the scope of the department to be more inclusive of visual and material storytelling bridging subject matter. Second, this project is building lasting collaboration across disciplines within our cluster. Third, has increased pedagogical range in the department. Currently, we are a performance heavy department, and this opened the discipline to students to connect to the curriculum who see themselves as storytellers but not performers.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

This project has been useful for the campus because it uniquely uses campus facilities and resources not just as passive frameworks for learning but turns those spaces and resources into necessities for learning. Additionally, our local competitor community colleges may have gallery spaces, but they do not have museums, and this gives a leg up to our students who are interested in the variety of ways museums and gallery spaces can be used across learning outcomes and careers.

F. Abstract for Board Report Summary

Dr. AC Panella researched and developed curriculum and curriculum trainings centered around museum and gallery spaces. This was done with the intent to incorporate museum pedagogy across disciplines. In addition to helping faculty give hands on experiences to students outside of the classroom, this project will build on and expand existing campus resources such as the SRJC Museum.

G. Appendices

- A. References
- B. Workbook
- C. Pedagogy of Wonder Article
- D. PDA Slides
- E. PDA Images

Sabbatical Leave Report

A. Applicant

Name: Albert Yu

Department: Business

Type of Leave: Independent Study and Project

Leave Dates: Fall 2022 and Spring 2024

B. Purpose of Leave

The purpose of my leave was to update my knowledge in technology, the IDEAA (Inclusion, Diversity, Equity, Anti-Racism and Accessibility) framework, sustainability concepts and trends in the hospitality industry for today's business world to develop and update course materials for Hospitality and Business Transfer classes in my department. This gave me a chance to develop and update our curriculum for today's technology focused Business world. I used this time to take online courses related to today's business world and attend industry conferences to assist with developing course materials. I also explored differences in the hospitality industry post COVID-19.

C. Objectives

1. Developed and updated course materials for teaching business and hospitality courses including, but not limited to, American Business in A Global Context (BAD 10), Introduction to the Hospitality Industry (HOSP 80), Computer Applications in the Real Estate Industry (RE 61), and Meeting and Event Planning (HOSP 58).
2. Attended and participated in the 2024 Northern California Hotel Conference in South San Francisco to develop my knowledge, competency, and relevancy.
3. Enrolled and completed increase Engagement to your Instagram Business Profile through Coursera.
4. Presented my findings to my colleagues in the Santa Rosa Junior College Business Department.

D. Narrative

It is imperative in today's world to prepare our students with the most relevant, current, and in-demand knowledge of technology in today's business world. Through maintaining currency with our curriculum in a constantly changing business environment, our students are provided with the best educational foundation to embark on a successful career. In addition, the IDEAA (Inclusion, Diversity, Equity, Anti-Racism and Accessibility) framework was also incorporated in updating course materials.

In American Business in A Global Context (BAD 10) I have incorporated Forage, which is a free virtual work experience site, that offers students a variety of free job simulations that include marketing, sales, strategy consulting, analytics, excel, human resources, and customer service to name a few. Forage has partnered with several corporations such as JP Morgan, Fidelity Investments, Accenture, Lululemon, Boston Consulting Group, and Red Bull where the companies have created job simulations for students to complete. Students work with model examples from a company and earn a certificate, which can be added to their resume and LinkedIn and offers them a chance to connect with recruiters from these top companies. This is a great way to add experiential learning to the course for free, integrating scalable project-based learning from top companies. These job simulations mirror the real work of employees at Fortune 500 companies, giving students a large advantage when it comes to their job search. Students are proven to be up to 71% more likely to earn an offer by completing an employer's job simulation compared to the average applicant. For American Business in A Global Context, I have chosen the Career Readiness job simulation from the National Urban League that covers interview and career skills. After completing the simulation, students must write a reflection paper about their experience. In addition to American Business in A Global Context, I have also incorporated job simulations in my Introduction to the Hospitality Industry (HOSP 80), Introduction to the Hotel Industry (HOSP 63), and Introduction to Solving Business Problems w/spreadsheets (BAD 53) classes. Forage offers over 300 simulations and is a great tool for the entire business department and can be incorporated in all the department's courses. This job simulation is interactive and not conducive to students using AI to complete their schoolwork.

For Introduction to the Hospitality Industry (HOSP 80) I have incorporated a free open textbook and also created a supplement of content in the first module about the history of hotels with the history of black hotel ownership and the Green book that existed before the Civil Rights Act of 1964 that served as a guide for black and minority travelers as safe places that provided accommodations. The Green Book has also inspired a whole new generation of black travel guides and podcasts that exist today. This module also covers China's Hi-speed rail network. A new discussion board assignment exists asking students to summarize the history of the hospitality industry with this additional information. I've also included several resources including links to the National Society of Minorities in Hospitality, the Latino Hotel Association, Asian American Hoteliers Association, World Rainbow Hotels, and Women of Hospitality.

The second module of Introduction to the Hospitality Industry (HOSP 80) is about Hospitality Careers and I've shared my own experiences working in the industry for 15 years and included a

Zoom interview with the Vice President of Hotel Operations at the Grand Ho Tram Resort and Casino in Vietnam. I also created a podcast covering interview skills. The module ends with a video from the National Restaurant Association titled “Celebrating the Women of the Restaurant Industry.”

The third module of Introduction to the Hospitality Industry (HOSP 80) covers restaurants and I’ve created content that covers COVID-19’s impact on California’s food service industry and how businesses overcame the pandemic. I also have a Zoom interview with the Regional Chain Director at Ste. Michelle Wine Estates.

The Computer Application in Real Estate (RE 61) class starts with a module on email, email contact management systems, and email newsletters. Different types of email templates for Realtors are introduced. Students learn about different contact management systems such as Constant Contact, Mailchimp and Tynyletter. Students learn about types of topics to include in a real estate focused newsletter targeted towards potential clients. I created the content for the entire course and in addition to email newsletters, it also covers Customer Relationship Management Systems, graphic design and Canva, taking photos and videos with smartphones, social media and AI tools.

I have incorporated a Capstone project where the students will put on an event on the last day of class on the Petaluma campus featuring a headlining artist and food for the Meeting and Event Planning (HOSP 58) class. A free online textbook, Cultural Heritage Tourism, and content about Greener Meetings and Events have been adopted. Cultural Heritage Tourism highlights three cultural events at community colleges that have grown, the Blue Ridge Folklife Festival at Ferrum College; Home Craft Days at Mountain Empire Community College, and Merle Fest at Wilkes Community College. The three case studies will serve as examples and inspiration for SRJC Petaluma’s event at the end of the semester. I also incorporated material for Green Meetings and Events.

The 2024 Northern California Hotel Conference and Trade Show, held on Thursday, May 23, 2024, was informative and educational. I learned about the current state of the hotel industry and current trends such as rising insurance costs and mobile panic buttons for housekeepers. The Asian American, Native Hawaiian, and Pacific Islander Higher Education Leadership Development Summit was put on by the White House at UC Berkeley. I attended a LinkedIn workshop that discussed many strategies for using LinkedIn, attracting an audience and followers, and creating more career opportunities. It covered using LinkedIn as a microblogging site and posting long content to attract more followers. Technology is always evolving, and this updated information will be great to incorporate in my classes and share with my students

I completed a class in Coursera about increasing engagement in your Instagram Business profile. It covers using Canva to create graphics to use, shooting videos to create reels, which the algorithm favors, and hashtags. This information can be applied to several of the courses I teach

such as BAD 10, Computer Applications in the Real Estate Industry, and Meeting and Event Planning (HOSP 58). In HOSP 58, Meeting and Event planning my class will be able to put these theories into practice by promoting the end of semester capstone event to the Petaluma and SRJC community.

I completed a presentation to the Business Department about my findings and updates.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

The modules I have created allow me to bring currency and real-world examples and knowledge to my students. I developed IDEAA resources and content and was able to attend an industry conference and update my social media skills and knowledge.

2. How did this sabbatical leave benefit students in my discipline?

The modules I have created will provide students with up-to-date material incorporating technology and IDEA principles that will best prepare them for the business environment they will enter after graduating. The Forage simulation will prepare them for the workplace and make them more attractive to potential employers. The IDEAA components included in HOSP 80 will benefit all students and provide students with support networks and a sense of inclusion.

3. How did this sabbatical leave benefit my department?

The free open educational resource textbooks, Forage job simulation site and Zoom interviews are all available for use by faculty in my department to incorporate in their own courses. The Forage site contains job simulations that can be applied for most business courses with topics including Accounting, Entrepreneurship, Marketing, Law, Real Estate, Sales, Interview and Career Skills. It also includes topics that other departments at SRJC can utilize such as Design, Engineering, Government and Public Policy, Health Care, Life Sciences and Software Engineering.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

This sabbatical leave supports SRJC's strategic plan and its goals and objectives. Curriculum development supports the first strategy of academic quality and supporting excellent teaching and maximizing education learning outcomes. The Forage job simulation certainly provides robust professional development. The capstone in Meeting and Event Planning (HOSP 58) aims to develop community engagement and relationships, which is one of the district's core

values and supports the third strategy of responsiveness to our community. The module about the history of hotels certainly supports the fourth strategy and supports inclusion, diversity, equity, antiracism, and accessibility (IDEAA).

F. Abstract for Board Report Summary

Albert Yu updated and revised existing Business and Hospitality curriculum in core transfer courses such as BAD 10, HOSP 80 and HOSP 58 with a focus on technology, IDEAA principles, and sustainability. This enhanced curriculum prepares students to transfer to 4-year institutions, seek employment, and complete their education at SRJC. Job Simulations and a Capstone project organizing an in-person event at the end of the semester are examples of enhancements to existing curriculum. The new curriculum created during this sabbatical supports teaching excellence focused on implementing responsive practices that support the education and success of our diverse student population.

G. Appendices

Links to new BAD 10, HOSP 80, and HOSP 58 Open Educational Resource textbooks
Content Page for History of Hotels
Content Page of Hotel Organization Resources
YouTube Links of Zoom interviews
Forage Website Content
Event Case Study Slides for Meeting and Event Planning HOSP 58
Sample Assignments for Greening Meeting and Events for HOSP 58
Syllabus for RE 61 Computer Applications in the Real Estate Industry
Course Outline of Record for RE 61 Computer Applications in the Real Estate Industry
Syllabus for HOSP 58 Meeting and Event Planning
Course Outline of Record for HOSP 58 Meeting and Event Planning
2024 Northern California Hotel Conference Hotelier Registration and Schedule
Coursera Increase Engagement to your Instagram Business Profile Certificate
PPT slides of presentation to Business department

Sabbatical Leave Report

A. Applicant

Name: Amy LaCasse

Department: Disability Resources

Type of Leave: Independent Study/Project

Leave Dates: Fall 2024

B. Purpose of Leave

The purpose of my sabbatical leave was to conduct research on faculty-led Academic/Life coaching programs currently in place within higher education settings. I used this research to develop an Academic/Life coaching curriculum, which includes a resource guide and Canvas course, for use with SRJC Disability Resource Department (DRD) students who are interested in participating in this program. I developed a presentation that explains the purpose, structure and process of the coaching program to the SRJC community for faculty who wish to refer students to my program, or for faculty who wish to use materials from my coaching program with their own students.

C. Objectives

1. I conducted research on faculty-led Academic/Life coaching programs used in community college and/or four-year universities. I conducted individual live zoom meetings with over 5 different college professionals who provide academic/life coaching at their respective institutions; additionally, I reviewed academic literature and coaching industry publications to enhance my knowledge of coaching best practices. My objective has been completed.
2. Based on this research, I developed an Academic/Life coaching program with a flexible number of coaching sessions (rather than the initially proposed number of between three and six coaching sessions) available to each participant, with each session's duration to range between 10 to 90 minutes (rather than the initially proposed 30-60 minutes), to be conducted in person or via video. These discrete sessions are based on a curriculum to help students gain the skills and self-awareness to engage in intentional decision-making with respect to academics, career goal exploration and overall self-care. I developed a coaching resource guide that my colleagues can access as a guide if they wish to provide coaching to their own students. This objective has been met.
3. I created a presentation via Canva that will be used to explain the purpose, structure and process of the coaching program I developed. This objective has been met.

D. Narrative

1. I conducted research on Faculty-led Academic/Life Coaching programs used in community college and/or four-year universities.

In order to complete this research on faculty-led Academic/Life Coaching programs used in community college and/or four-year universities, I conducted an online search of colleges that have faculty/staff (not peer) led academic/life coaching programs in place. I also contacted the coach training school I attended to obtain contact information of recent coach graduates who provide coaching in higher education settings. I narrowed down the programs with whom I wished to connect to include only those programs that were led by trained staff or faculty who had received professional coach training. I then conducted individual zoom meetings with coaches from each of the following colleges: Rio Salado Community College (Tempe, Arizona), Ball State University (Muncie, Indiana), Southwestern Illinois College (Community college with three campuses), Spring Arbor University (private university in Spring Arbor, Michigan), and Massachusetts College of Pharmacy and Health Services (a private University in Boston, Massachusetts). Through these conversations, I learned a great deal about the development, content, and delivery of their academic/life coaching programs. The programs were in various stages of development, with the majority still within the first two years of inception. Each program purported the importance of developing robust data collection strategies in order to measure program outcomes. Additionally, I reviewed academic literature and coaching industry publications to enhance my knowledge in determining best practices for coaching students in higher education settings.

2. I developed an Academic/Life coaching program comprised of anywhere between one individual session and up to as many as is realistically possible during the semester. In-person or video sessions can be as short as 10 minutes and up to 90 (depending on specialist availability and student interest). These discrete sessions are based on a curriculum to help students gain the skills and self-awareness to engage in intentional decision-making with respect to academics, career goal exploration and overall self-care.

I referred to the research conducted in Objective 1 to facilitate the development of an Academic/Life coaching curriculum to help students gain the skills to engage in intentional decision-making. This program will be available to DRD students who are interested in participating in zoom or in-person coaching sessions. The program/curriculum is comprised of an adjustable number of discrete coaching sessions that can be adapted to individual student need. The original plan was to offer between three and six coaching sessions per participant, but after talking with other colleges, I learned that some students benefit from just one session to gain clarity on a particular issue, while other students prefer frequent, shorter sessions to check in and maintain accountability. Session length may vary between 10 minutes (as an accountability check-in) to up to 90 minutes for more in-depth exploration. Each session is based upon concepts/topics that fall within the scope of the coaching program that the student determines to be relevant to their current situation.

The culminating result of my sabbatical project is the creation of Canvas modules/coaching portal. The modules include research-based educational resources for students as well as

coaching exercises that are available to increase insight and solidify goals. Curriculum topics include, but are not limited to, stress, managing motivation, building empowering relationships with teachers and peers, reframing anxiety about the future into hopefulness that desired results are achievable, managing one's critical inner voice and developing a growth mindset. The content is available within a Canvas shell that coaching students can access. In addition to educational content, the shell/portal contains a menu of coaching exercises students can request their coach to facilitate during a coaching session.

I developed a coach guide in pdf format that includes an overview of academic/life coaching history, philosophy, best practices, and specific techniques used in coaching. This guide will be available to SRJC DRD professionals who wish to provide informal coaching to their students.

3. I created a presentation via Canva that explains the purpose, structure, and process of the coaching program I developed.

Once I developed the coaching curriculum/program, I created a presentation via Canva that I will use to explain to colleagues the philosophy, objectives, outcomes, and structure of the coaching program I developed. The presentation includes an overview of topics covered and the method of delivery to students, as well as information about referring students to the coaching program. This presentation will first be presented to colleagues in my department; depending upon the success or scalability of the coaching program, this presentation may extend to other student services or instructional departments.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

The development of this coaching program has allowed me to learn best practices for coaching students. These skills will allow me to create deeper connections with my students as I guide them in connecting the ways that their education relates to their longer term, life goals. This program allows me to give students concrete tools they can use not only in the academic setting, but in the workplace and other arenas. The program now provides a framework and a curriculum that allows students focused opportunities to self-reflect and create plans to manage obstacles.

2. How did this sabbatical leave benefit students in my discipline?

Students with disabilities often struggle with feelings of self-doubt, low locus of control, and negative self-talk due to past unsuccessful experiences in the educational system. My research solidified the evidence that coaching directly addresses these challenges by providing guidance in developing self-regulation abilities, academic and study skills, and improving communication and self-advocacy skills. I now have tools and strategies that can help students understand their individual strengths and use this information as they develop and implement practices to increase their resilience. Students can now complete research-based exercises and assessments during coaching (and between sessions) that allow them to: better understand their individual learning style, improve their executive functioning skills, create academic conditions to increase motivation, and recognize/regulate emotions that may impact academic success. The research

heavily indicates that this new self-awareness encourages students to make intentional educational choices that will in turn increase students' opportunities for success.

3. How did this sabbatical leave benefit my department?

Through the development of this Academic/Life coaching curriculum, I have created a resource that will be available to all faculty in my department. If there is interest, I am open to training others in my department to become comfortable in utilizing this curriculum, or at the very least, to refer their students to receive coaching from me. If the coaching program is successful, it may provide justification for other specialists in my department to receive funding to become certified coaches.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

My sabbatical project addressed the SRJC strategic plan to increase student success and support by allowing me, through the coaching relationship, to partner with students in exploring, developing, and enacting personalized action plans for any goal related to a student's college experience. Students now have the unique opportunity to become empowered participants in determining the ways that their academic goals also align with life goals. My sabbatical project also supports the Disability Resource Department's educational plan by helping students, through increased self-awareness, to develop action plans that will better enable students to advocate for themselves.

F. Abstract for Board Report Summary

Amy LaCasse spent her fall 2024 Sabbatical conducting research on faculty-led Academic/Life coaching programs currently in place within higher education settings. Based on this research, Amy developed an Academic/Life coaching curriculum, which is comprised of a reference guide and Canvas course module, both of which include instructions for delivering the content during coaching sessions. These resources can now be used with SRJC disability resource students who are interested in planning, goal setting and gathering insights about self, which then allows students with disabilities to make intentional educational choices. In addition to directly serving students, this program/curriculum will also be shared with colleagues who may be interested in implementing this program. This project increased Amy's ability to empower students as she partners with them in developing personalized action plans for self-determined goal(s) related to a student's college experience.

G. Appendices

The following documents have been submitted with this report in an electronic format:

- List of research resources used to complete project
- Coaching program manual/reference guide in .pdf format (COACH DRD reference guide)
- Presentation (in PowerPoint format) that explains the purpose, structure, and process of the COACH DRD

- Access to COACH DRD Canvas modules available upon request

Sabbatical Leave Report

A. Applicant

Name: Andrea Alvarado

Department: Counseling

Type of Leave: Project

Leave Dates: Spring 2024

B. Purpose of Leave

In my service as the department chair for the last three years, I was responsible for training new full-time and associate faculty. I discovered that the department didn't have a training program for new hires that could be independently administered. I realized that such a program would enhance the quality and effectiveness of our training process.

Using my experience with Canvas in building and teaching online classes, I developed a comprehensive online program using Canvas to train new full-time and associate counseling faculty. It includes training updates for all counseling faculty on selected topics and is designed for easy navigation and independent use.

C. Objectives

1. I completed preliminary research on essential content and most effective delivery formats. As part of my research efforts, I successfully surveyed 20 CA community college campuses to identify those that currently offer an online counselor training program and requested to demo training programs as available. I was able to demo 2 training programs in addition to meeting with one additional college that was in the process of creating a similar program to discuss ideas and plans. I also surveyed SRJC Counselors and one other student services department (DRD) for recommendations.
2. I developed a pilot online training program for new full-time and associate counseling faculty based on the information gathered during my research phase. I created 14 modules, which exceeds the minimum of three proposed covering content such as SRJC Academic Programs, Transfer, and SRJC Policies and Procedures. The online training program offers components for ongoing professional development for all counseling faculty. One example is SRJC Health Sciences Programs, since their requirements and admissions criteria are updated regularly. I created a module focused specifically on these programs that can be easily referenced.

Effective Fall 24

3. I evaluated the effectiveness of the pilot training program through SRJC Counseling faculty feedback. I received feedback from Counselors for the entire training program in addition to getting feedback for targeted sections from specialized faculty (Transfer, specialized programs).
4. Based on the research and feedback on the effectiveness of the pilot program, I implemented changes and produced a final training program ready for launch.

D. Narrative

1. During my research phase for the first few weeks:
 - ☐ I created and administered a survey to the counseling department and one other student services department (DRD) regarding essential content and delivery format. I developed the survey in MS Forms requesting feedback on content for the training program (3 questions following an introduction of the project and a summary of proposed 21 content areas). This was sent to the Counseling Department internal email list and to the DRD department counselors. I received 18 responses which I reviewed before creating the program.
 - ☐ I surveyed 20 CA community colleges using my professional network to obtain referrals from specific people. I reached out to each one individually for more meaningful interaction and dialogue. Out of the 20 colleges surveyed, 18 colleges responded. I identified the minimum of 2 colleges that offer an online training program and was able to demo their programs and obtain recommendations. One additional college shared their plans to develop a similar program. We met and shared ideas collaboratively.
 - ☐ Both programs that I reviewed were built in Canvas and the third college intended to use Canvas as well. In all instances, the majority of content areas were in line with my initial outline. I was given ideas on a few more areas after this review process.
 - ☐ After reviewing my department's and DRD's feedback along with the ideas garnered from the demos, I integrated all the data into a final outline of content areas for the training. I modified the original 21 areas and consolidated them into a total of 14 major categories.
2. I built the training program in Canvas, which took approximately 2-3 months. The program addresses the large amount of content and process knowledge that is unique to each individual institution: academic programs offered, college policies and procedures that students must navigate, counseling services, and departmental policies and procedures to name a few. Since we also sometimes hire faculty that are new to community college counseling, the training addresses all the components of CA community college counseling, which requires a broad knowledge base of certificates, associate degrees, and transfer to universities.

- I designed the program in the following structure:
 - i. Content separated into modules
 - ii. Content specific to full-time versus associate faculty wasn't necessary to separate into distinct modules since information is the same for all faculty; however, one page dedicated to associates was created that covered strategies to stay up to date on competency areas and included other useful tips to be successful within the department.
 - iii. Integrates references to our existing internal Counseling Binder (web site with information and resources)
 - iv. Allows for ongoing updates and is easy to maintain
 - v. May be used to train existing faculty on topics as refreshers or updates

- The modules reflect all the content areas and are designed for both full-time faculty and associates. Each module includes a mixture of:
 - i. Written out informational narratives/outlines
 - ii. Instructional videos – I created the following videos:
 - 1. Welcome/Overview Video
 - 2. Overview of the SIS (Student Information System)
 - 3. Degree Audit in SIS
 - 4. Educational Planning in SIS
 - iii. Resources – online, district-wide, personnel, etc.
 - iv. Exercises/activities that allow faculty to apply and test their knowledge:
 - 1. Knowledge checks (quizzes) at the end of 7 of the modules
 - 2. List of example student scenarios to practice education planning using the content from the training

- Below is an outline of the 14 modules created. In addition to subject matter content areas, I added a few other areas that are important for new counseling faculty: onboarding, other responsibilities beyond counseling, and department business.
 - i. Training Introduction
 - ii. CA Community College Overview
 - iii. Steps for students to get started
 - iv. SRJC Academics
 - v. Health Sciences Programs that require applications
 - vi. Counseling Programs & Services: Learning Communities/Special Populations
 - vii. Student Services & Other Programs: A&R, Financial Aid, etc.
 - viii. Common Petitions
 - ix. Student Information System (SIS)/ILINX
 - x. Education Planning/Counseling Practices
 - xi. Counseling/Social Work & Human Services Courses and Curriculum/SLOs
 - xii. Other Counselor Responsibilities
 - xiii. SRJC Counseling Internship Program
 - xiv. Counseling Department Business

3. To evaluate the effectiveness of the pilot training program, I asked three SRJC counselors to complete the online program and provide feedback using a pre-developed questionnaire. I also requested recommendations from a few other specialized counselors. *
 - All three counselors reviewed the entire program and provided feedback. Two gave detailed feedback via email and one counselor reviewed the program with me via Zoom. I incorporated all recommendations, which were mainly pieces of information within the existing content.
 - I reached out to a couple other counselors to request review of specific content areas. For example, the Transfer Center Director checked the transfer information, the EOPS Counselors reviewed the EOPS page, the Nursing liaison provided edits for the nursing pages, the Social Work/Human Services Program/Second Chance/IGNITE Coordinator gave additional information for these programs, and one of the Associates gave recommendations for the page focused on part-time counselors.
4. I reviewed and implemented the counselor feedback and finalized the comprehensive online counseling training program. Upon the recommendation of the department chair, I provided approximate time frames needed to complete each module. I determined that the training is approximately a total of 4 hours.

*I reserved approximately one month for objectives 3 & 4, and this time was sufficient to complete the project.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

I currently have been given a few ancillary chair duties for the upcoming years, including involvement with the training of any new faculty to the department. Having robust training in place saves time with planning and development and provides a more efficient process for new faculty. I will need to take away less time from serving students. The online training frees up at least 4 hours of time for the trainer and allows the trainee to continue to refer back to the material which is additional time saved.

2. How did this sabbatical leave benefit students in my discipline?

Students will benefit by receiving counseling from very thoroughly trained new counselors that have received accurate information and resources. New counselors will be able to serve students more quickly having an efficient training program. In addition, all counselors will have access to updated information and new training topics that ensures that SRJC students are getting the most accurate, up to date information and resources.

3. How did this sabbatical leave benefit my department?

Any counselor in my department may use this training program even after I am no longer in a trainer role. Since counselors are always needing to stay up to date with ever-changing

information, legislation, and policies, we now have an efficient mechanism to disseminate all of these important components to our daily work with students.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

The Counseling Department Orientation and Procedures Manual outlines three main student learning outcomes (SLOs). Two of these are addressed by this project – see below:

1. As a result of academic counseling session(s), students will be able to access college information and utilize resources to meet their individual needs.
2. As a result of academic counseling session(s), students will understand the requirements necessary to reach their educational goal as demonstrated by the collaborative development of an educational plan.

The training program develops competent and effective counselors that enhances the department's major SLOs listed above. New counselors will develop the essential subject matter competency required to guide students to appropriate information and resources and to develop accurate and effective education plans.

In addition, student success is one of SRJC's Strategic Plan components. This program supports the development of the whole student from early college awareness through successful completion of education and career goal.

F. Abstract for Board Proposal Summary

Andrea Alvarado developed an online training program in Canvas for new full-time and associate counselors that covers the vast amount of information that counselors must know to best serve our students. Subject matter competency areas include academic programs, transfer, college policies and procedures, student resources, and many other areas related to student success and reaching academic and career goals. The program allows for ongoing training and professional development for all counselors. Content was created incorporating the research conducted via surveys given to the Counseling Department, one other student services department (DRD), and other CA community colleges. Andrea has provided the Counseling Department with a comprehensive counseling online training program.

G. Appendices

- ☐ Counseling Department/Student Services Feedback Survey (Research Survey)
- ☐ CA Community College Survey List (CCC Survey List) – includes results summary including demo information
- ☐ Counselor Online Training Feedback (Survey Summary) – feedback was provided verbally and some in writing (via emails)
- ☐ Canvas Training Program (Published in Canvas)

Sabbatical Leave Report

A. Applicant

April R. Ellenwood Oliver

Department: EMLS

Type of Leave: Formal Coursework and Project

Leave Dates: Fall/Spring 2023/2024

B. Purpose of Leave

During my sabbatical leave, I completed formal coursework in Anaheim University's (AU) Doctoral program in Teaching English to Speakers of Other Languages (TESOL). This program is designed to help educators form a critical understanding of the interdisciplinary literature that informs the field of TESOL, evaluate research-based evidence and consider its relevance to TESOL, design and evaluate curricula and instructional materials, design and conduct research studies that address pedagogical issues relevant to TESOL, and undertake a leadership role in TESOL. The outcome of my sabbatical leave is that I compiled a language teaching bibliography and developed course materials for EMLS 371: Intermediate Reading/Writing/Grammar for EMLS Students to share with EMLS faculty. Research conducted through my coursework, specifically scholarship on the effective teaching of academic reading and writing skills to English Language Learners (ELLs) with limited or interrupted formal education informed this materials development.

C. Objectives

1. Completed coursework in AU's Doctoral program in TESOL.
2. Compiled a bibliography of current research and relevant scholarship that addresses language teaching areas of interest.
3. Produced new and updated reading and writing course materials for EMLS 371 designed to assist English Language Learners (ELLs) with limited or interrupted formal education.

D. Narrative

Anaheim University's Doctoral program in TESOL is a three-year, intensive program designed to provide students with the knowledge, skills, and ethics needed to serve effectively as educational leaders in the face of language and cultural diversity, new technology, and a rapidly changing global environment. I began the program in fall 2022 and will complete the program at the end of 2025. Coursework in this program addresses four broad themes: studies in applied linguistics, aspects of language teaching, professional development, and research methods for language teachers. Courses successfully completed during my sabbatical project were Interlanguage Pragmatics, English Language Teaching (ELT) Leadership and Management, ELT

Materials Development, Language Teacher Education, and Key Components in an Experimental Study Using Quantitative Research Methods. This program has better equipped me to take on additional leadership roles in TESOL at SRJC and beyond, contribute to English language teacher education professional development offerings, engage in language teaching research, and develop language courses and teaching materials.

During my sabbatical project, I read extensively on current pedagogical theories in linguistics with the goal of finding a dissertation topic. To this end, I have focused specifically on two areas: EMLS academic writing instruction using artificial intelligence (AI) and explicit instruction in interlanguage pragmatics. With the launch of ChatGPT and the integration of AI into various language software programs, numerous studies exploring the use of these programs as Automated Writing Corrective Feedback (AWCF) tools highlight the positive impact of these feedback tools on the writing process, including the provision of immediate feedback with metalinguistic explanations, improvements in grammatical and mechanical issues, and opportunities for multiple draft revisions. Another area of interest is pragmatics instruction on the topic of giving advice and suggestions. All too often learners of English transfer their first language pragmatic norms to their second language social contexts, but this causes pragmatic challenges, especially in the area of giving suggestions. Because these learners may not perceive giving suggestions in certain situations as too direct or impolite, which may negatively impact their communicative interactions, it is important that they receive explicit instruction on giving suggestions and practice during class time to learn not only the pragmalinguistic forms, but also the appropriate sociopragmatic usage. I have compiled a bibliography with academic publications that I considered the most useful and relevant to assist EMLS instructors in broadening their understanding in these areas.

Through my research and readings, I have developed new and updated course materials for EMLS 371. The text-driven approach I used draws upon theories of second language acquisition (SLA) and development, teaching principles, insights into actual language usage, and the systematic assessment of materials adopted for classroom use. Upon reflection, SLA principles that are important to me include providing language learners with comprehensible input that is meaningful and rich; engaging learners emotionally and cognitively; offering opportunities to use language for communication and assisting learners in the processing of input and producing output that is meaningful; aiding learners in active discovery of language features in input and making them aware of the disparities between their use of strategies, such as visualization and inner voice speech in acquiring English, and those they used to acquire their first language (L1); and making available opportunities for learners to respond personally to the content of input and ensuring that this input is also contextualized. I also considered the situational factors of my local context, such as the resources of Santa Rosa Junior College, the courses offered, the course objectives, and the backgrounds, needs, and wants of my learners with special attention on how to best serve ELLs with limited or interrupted formal education. Through these processes, I developed a set of universal and local criteria, which I then used to inform the development of my materials. I will share samples of these materials in the EMLS department Canvas repository, so they are accessible to instructors.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?
The coursework I undertook during my sabbatical leave has shaped my classroom instruction by making my teaching more responsive to the academic reading and writing needs of my students, especially those with limited or interrupted formal education. In creating and adapting teaching materials, I implemented a systematic and well-grounded approach that draws upon theories of second language acquisition (SLA) and development, teaching principles, and actual language usage. I have identified SLA theories that I explicitly integrate into these course materials, in order to better meet the needs of my students. In addition, my gained knowledge of current ELL research has enabled me to better advocate for underrepresented students and support instructional change amongst my colleagues.
2. How did this sabbatical leave benefit students in my discipline?
Within my own classes, the students I teach will benefit from my growth as an instructor. With the course materials that I created and adapted, students solve reading and writing problems, grapple with different academic texts, and better develop their critical thinking skills, thereby developing tools they need to be successful, whether they are transitioning from noncredit to credit EMLS courses or completing credit EMLS courses and then transfer-level courses. Students in other classes can also benefit as I share my research knowledge through the bibliography I created. Instructors can incorporate the EMLS 371 materials I developed into their classes and/or use them as templates to update their own materials, thereby benefiting students throughout the EMLS department, especially students with limited or interrupted formal education.
3. How did this sabbatical leave benefit my department?
The EMLS department class enrollments provide a significant amount of apportionment for SRJC and directly impact SRJC's status as a Hispanic-Serving Institution. This ever-increasing percentage of the overall student population enriches our classes and campuses, yet many of these students face barriers to achieving their goals. The expertise I have gained in materials development and current TESOL research, especially on barriers that impact the academic reading and writing skills of EMLS students (including a lack of formal education) will allow me to support my colleagues in creating lessons and materials to better assist EMLS students in overcoming these barriers.
4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?
The course materials I have created consider how language aptitude, motivation, and learner beliefs, among others, impact language teaching and how individual differences in classroom learners can be accommodated instructionally; and language teaching and how instructional practices relate to the broader socio-political contexts in which the teaching and learning take place. The bibliography I have written contains current research and theory on interlanguage pragmatics and how instruction can effectively develop L2 (second language) pragmatic competence; and the impact of AI on writing instruction for lower-proficiency level EMLS

students. The content of the bibliography and course materials align with the EMLS department's goals of reflecting and serving the needs of a growing and changing student population and preparing students to meet academic, vocational, and personal goals and reflects the college's values of Learning, Academic Excellence, Diversity, Compassion, and Innovation.

F. Abstract for Board Report Summary

April Ellenwood Oliver completed coursework in Anaheim University's Doctoral program in Teaching English to Speakers of Other Languages (TESOL). This program is designed to equip instructors to take on TESOL leadership roles, contribute to EMLS teacher education professional development offerings, engage in language teaching research, and develop language courses and teaching materials. Connected to her coursework completed during the sabbatical, she compiled a bibliography of current research and relevant scholarship that addresses language instruction in the areas of interlanguage pragmatics and artificial intelligence. As a result of her research and studies, she developed course materials for EMLS 371: Intermediate Reading/Writing/Grammar for EMLS Students, designed to help English Language Learners, including those with limited or interrupted formal education, learn essential academic reading and writing skills.

G. Appendices

1. Transcript from Anaheim University
2. Bibliography
3. Sample of course materials for EMLS 371
4. Screenshots materials share in EMLS Dept Faculty Resources Canvas Shell

Sabbatical Leave Report

A. Applicant

Name: Brian Antonson

Department: Communications, Digital Filmmaking Program

Type of Leave: Project

Leave Dates: Fall 2023, Spring 2024

B. Purpose of Leave

The intent of my sabbatical has been to write 3-5 quality short film scripts (less than ten pages each), to serve the Digital Filmmaking program by providing original content for students to shoot, produce and practice with in various classes and workshops. Unlike in the past where class production scripts came from random sources like the internet, the goal of writing original scripts is to have a bank of higher quality scripts to choose from for our class productions and exercises that are tailored to suit our classes' specific needs. The five scripts I wrote are attached, and are intentionally very different from each other in order to serve different student learning outcomes.

In order to prepare for all of this writing, I studied film form by attending in-person, three reputable international film festivals: Tromsø International Film Festival, the Rotterdam International Film Festival and the Berlin International Film Festival. Furthermore, I was able to study the writing process at one of the most reputable writer's workshops in country, the Sundance Writer's Lab, an 8-week synchronous on-line writer's workshop. All of these experiences helped me to prepare and write the attached five scripts.

C. Objectives

1. I achieved my first objective by studying the works of contemporary filmmakers at three acclaimed international film festivals: the Tromsø International Film Festival, the Rotterdam International Film Festival and the Berlin International Film Festival. I attended all three festivals in-person, and was attending films and events full time over the course of each festival. It was a month-long cinematically immersive experience.
2. I achieved my second objective by participating in Sundance's writer's workshop, *Sundance Collab "Crafting Your Short Film,"* an 8-week synchronous on-line writing intensive workshop. Over the course of this workshop, I developed and completed, *Anna's Plan*

(attached). I got invaluable writing assistance and creative input, while getting practical insights on different ways to teach creative script writing.

3. I achieved my third and primary objective by writing 5 original short film scripts. These script which will serve as content for the Digital Filmmaking Program's production courses and workshops. Each one is intentionally distinct in order to serve different student learning outcomes. Furthermore, I actually shot and edited one of these scripts and am currently entering it into film festivals in the US and around the world.

D. Narrative

OBJECTIVE #1: prepare for writing by studying the works of contemporary filmmakers at three acclaimed international film festivals.

I prepared for writing my original short film scripts by studying the works of contemporary filmmakers at three acclaimed international film festivals. The first festival was the Tromsø International Film Festival (TIFF) held January 15 through January 21 in Tromsø, Norway. It was cold! But incredible – the small town had six working theaters showing films around the clock to largely sold-out audiences. Then I attended the Rotterdam International Film Festival held January 25 through February 4 in Rotterdam, Netherlands. This is a larger, more established festival in a more metropolitan setting. The films there tended to be less conventional, more experimental, with a handful of more popular award-worthy films. The third festival I attended was the Berlin International Film Festival held February 15 through February 25 in Berlin, Germany. This was the largest, most established and reputable festival of the three. Filmmakers like Martin Scorsese was in attendance and was honored with a lifetime achievement award. In Berlin I got to see many of the films that will be in the Academy Award race this year. In all I attended 26 days of in-person film screenings in three different countries, watching more than 75 contemporary short and feature films. This was by far the most immersive cinema-watching experience of my life. (I attended a week of chiropractic sessions after the final festival in Berlin wrapped up because my neck was wrecked from sitting in the same position for two months! Chiropractor receipts available upon request 🙌.)

Seeing the latest and greatest of new cinema from around the world was an incredible learning experience that surpassed my high expectations. I was able to observe general themes that artists have been wrestling with, such as how different countries and cultures are dealing with and thinking about immigration such as in the Polish film, *Green Border*, which was attended by the auteur filmmaker, Agnieszka Holland, who received a rare standing ovation at the Rotterdam festival. I could see how various filmmakers were making high quality films with very little money, such as in the Canadian film *Matt and Mara*. And I could see how different screenwriters were innovating storytelling techniques, such as in *La Cocina*, *A Different Man*, or *I Saw the TV Glow*. All of this was very helpful for me as an instructor teaching this art form and helped me to prepare for my own fiction screenwriting.

OBJECTIVE #2: prepare for writing by participating in a reputable writer's workshop.

I prepared for writing my original short film scripts by participating in Sundance's writer's workshop, *Sundance Collab "Crafting Your Short Film."* We met over the course of eight weeks synchronously on zoom from February 29 through April 11. (Sundance certificate of completion attached.) Each class session was 2.5-3 hours long and included: lectures from independent filmmakers, watching acclaimed short films, discussing writing strategies, sharing participants' original writings, and giving & receiving creative feedback. The attached script, *Anna's Plan*, was the script that I wrote and workshopped at the Sundance Lab. Overall, I improved on my skills as a writer by going through the rigorous writing process myself. And I improved on my skills as a teacher by being a student for eight weeks.

OBJECTIVE #3: write 3-5 original short film scripts to serve as content for the Digital Filmmaking Program's production courses and workshops.

I completed 5 original short film scripts (attached) to serve as content for our production program, including our new BACCC's Regional Virtual Production course. Each of the five scripts are quite different from each other and can be used as class production materials in different ways. Scripts are attached.

Script #1: *Anna's Plan*

- *It's Nov 4, 2024, election day in Walworth, Wisconsin, a swing state, and Anna has a plan to get her parents, conservative evangelicals, to vote Democrat or not vote at all.*
- 4 drafts, 17 pages, comedy.
- Various drafts and iterations of this story were developed over the 8-week long Sundance Writer's Lab last February-March. The writing process included peer reviews, one-on-one meetings and Sundance teachers' critiques. The final draft was generally well received by the Sundance staff as a poignant and timely story about one of the most dramatic elections in the modern US history, and how that might be playing out in Middle-America.

Script #2: *Poopsy*

- *An unpleasant situation involving their dog, Poopsy, tests Rachel and Jason's relationship.*
- 7 drafts, 12 pages, comedy.
- I worked through many drafts of this script and got a variety of feedback from colleagues and peers in the industry. I was able to actually shoot the script and spent a significant amount of time editing it. The final film is finally completed and is now competing in a variety of film festivals in the US and abroad. I would include a link to the finished film, but because the film is currently competing in a variety of Academy Award qualifying film festivals, I'm not allowed to have the film published

anywhere. But I'm happy to screen the film or parts of the film to the committee, and to invited members to the festival premiere ☺

Script #3: *Burning Bright*

- *A lonely widow from a small town marries a quiet outsider. When an arsonist starts a series of deadly wildfires, her husband becomes the key suspect.*
- 5 drafts, 13 pages, drama.
- This is a script I adapted from a short story by master storyteller, Ron Rash. This script will serve as a model for students in our screenwriting courses for how to adapt literary works into the screenplay format. It will also serve to help students understand how to adapt psychological content to the visual medium of cinema. I am currently in talks with Mr. Rash's literary agent to secure the production rights to this script based on his story. If successful, this project has tremendous potential to provide a professional production experience for our students as well as a powerful, festival-worthy short film.

Script #4: Lighting Exercise & FFP Spot

- *At the end of a long day, a college student has to navigate a dark, ominous walk through campus to get to their car. Along the way they encounter something they don't expect.*
- 2 drafts, 1.5 page, horror spoof.
- This is a simple script designed to be a workshop script to teach intermediate and advanced production students cinematic lighting – in this case lighting for horror and for large exterior spaces. It is also written so that the final edited piece may serve to promote FilmFest Petaluma (FFP). The lack of a complex story or intricate dialogue will help students to shoot this script in just several class periods while focusing on the craft of lighting. If the production goes well (i.e., meets professional standards) the final product may be used as a short FFP commercial spot.

Script #5: Virtual Production Exercise & Spot

- *A bored high school student imagines themselves doing great, fantastical things.*
- 3 drafts, 1.5 pages, fantasy.
- This is a simple script designed to be a workshop script for virtual production students learning how to use chroma key effects (the replacing of a character's background with some other source). It is also written so that the edited piece may serve to help promote the Virtual Production class and program. The lack of a complex story or intricate dialogue is to allow students to be able to shoot this script in just several class periods while focusing on chroma key techniques, both in production and post-production. The final product may be used as a short Virtual Production commercial spot.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

I teach screenwriting and filmmaking, so, it is reasonable that I should have a good working understanding of the process and current trends. This sabbatical afforded me the time to be able to concentration and write in a daily, disciplined, and sustained way. By keeping me personally connected to the writing process, it will help me to better teach that process. I was able to attend several of the best film festivals in the world. And I attended a reputable intensive writing workshop. Lastly, I was able to actually produce (shoot and edit) one of my scripts, which was a fantastic hands-on experience that will absolutely help me to be better suited to teach my filmmaking courses.

2. How did this sabbatical leave benefit students in my discipline?

I expect that students will benefit from my sabbatical because it has made me a better writer, filmmaker and teacher. This past year afforded me the resources to practice what I'm teaching. This has helped me to better understand the writing and storytelling process and will therefore help my students. The Sundance Writer's Lab gave me fresh insights on how to teach writing, as well as helped my own writing process. The film festivals I attended exposed me to current content and trends in the industry from around the world. All of this I can share with students in the classroom. Furthermore, I have actual scripts a result of this sabbatical, scripts we will be able produce as classroom exercises. Lastly, I now have a final completed short film of my own that is currently on the film festival tour, which will earn me greater respect from my students and peers.

3. How did this sabbatical leave benefit my department?

My sabbatical work has helped my department and my cluster by strengthening the Digital Filmmaking program, and by helping me to become a better a teacher. I am more current with professional industry standards as it relates to storytelling and international cinema trends. Things that I learned at the Sundance Lab I can bring to our students here at SRJC. Having a teacher in the department who has attended these events and festivals, and is writing and making films of their own, helps to bring greater regard to the program/department/cluster. I believe that having a teacher with on-going professional experience helps to increase students' respect for the program and ultimately will help class enrollments.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

In our department's education plan, we state that we are committed to maintaining high standards of academic excellence; maintaining a faculty and staff who are current and knowledgeable; preparing students to participate as citizens in an ever-changing world. By attending three reputable international film festivals, and one of the most notable writing workshops in the country (Sundance), I have helped to maintain my own academic excellence,

and stay current with cinematic trends. This will help me to prepare students to work in an ever-changing multicultural profession.

F. Abstract for Board Report Summary

Brian Antonson wrote five original short film scripts which will serve as original content for the Digital Filmmaking Program's production courses and workshops. Each script focuses on a different aspect of the storytelling/filmmaking process and will serve various classes in different ways. Part of Brian's preparation to write included: studying film form in-person at three of the world's most acclaimed international film festivals (Tromsø, Rotterdam and the Berlin International Film Festivals), and participating in Sundance's reputable writer's workshop, *Sundance Collab "Crafting Your Short Film."* Brian shot and edited one of his scripts, *Poopsy*, and is now in the process of competing with it at various film festivals around the country and the world.

G. Appendices

The following documents and receipts are attached:

- Script #1: *Anna's Plan* (written at the Sundance Writer's Lab)
- Script #2: *Poopsy* (produced and currently on the film festival circuit)
- Script #3: *Burning Bright*
- Script #4: Lighting Exercise & FFP Spot
- Script #5: Virtual Production Exercise & Spot
- Sundance Graduation Certificate
- Festival Receipt-Berlin
- Festival Receipts – Rotterdam
- Festival Receipts – Tromsø

Sabbatical Leave Report

A. Applicant

Carmen Castillo

Department: English

Type of Leave: Independent Study

Leave Dates: Spring 2024

B. Purpose of Leave

The intent of my sabbatical was to produce three creative non-fiction pieces on the theme of Mexican art and culture to share with my English students as examples of the personal essay genre for their own paper writing. I traveled through Mexico for three weeks where I gathered impressions of the art and cultures of three different regions. I gave a presentation to my English colleagues at a department meeting to share my impressions of Mexican identities under the framework of art and cultural appreciation for our Latinx and Chicanx students.

C. Objectives

1. Traveled to three different regions in Mexico and wrote three creative non-fiction essays on Mexican art and culture
2. Compiled these essays in a reader for my English students to aid them in personal essay writing.
3. Presented my impressions of Mexican art and culture to my English Department colleagues.

D. Narrative

I traveled to three different regions in Mexico and wrote three creative non-fiction essays about Mexican art and culture through the lens of my Mexican American identity, and the complexities of that identity. I traveled the Yucatan, Oaxaca, and Mexico City and Puebla. The capital of Yucatan, Merida, hosts a vibrant arts festival at the beginning of January every year celebrating the city's founding; this was my first destination. The city was bursting at the seams with cultural events, concerts, theatrical presentations, food tastings and art exhibits. I traveled to the city of Oaxaca, famous for its Mesoamerican pyramids, vast covered market, regional cuisine like molé, and varied musical traditions, including marimba ensembles. From there, I traveled to

Mexico City, home of numerous museums featuring Mexican art and culture. From there, I traveled to Puebla, a city culturally rich with arts and crafts.

In her essay, “How to Tame a Wild Tongue,” Gloria Anzaldúa writes, “Deep in our hearts we believe that being Mexican has nothing to do with what country one lives in. Being Mexican is a state of soul—not one of mind, not one of citizenship. Neither eagle nor serpent but both.” Anzaldúa bravely conquers, ahead of her time, what we at the SRJC are grappling with: the courage to allow our Latinx students and all students to use their own authentic voice to join in the academic discourse. Like Anzaldúa, I too believe that being Mexican is a state of soul, for me and for my Latinx students. In my travels through these areas, I explored what the soul of being Mexican is to me. I wrote three personal essays celebrating the art and culture of Mexico as well as reflecting on the complexities and hardships of my family’s native culture and its relation to me as a Mexican American.

Based on my travels, I developed a body of work that I shared with my students, especially my Latinx students, to give voice to the depth and beauty of our culture and to model that, as a professional academic in the United States, my Mexican culture and soul has a place here. The benefit to my students has been to normalize how other voices, especially oppressed voices, have a place in academic discourse. This ideally has awakened in them a sense of pride, belonging and possibility. I also presented to my English department colleagues at a faculty meeting a description of my travels and the richness of the culture as a way to expand their view of the background of their own Latinx students. In sharing my work with my students and colleagues, my aim has been to help the SRJC in the areas of equity and inclusion, as well as these aspects of our SRJC mission: “to cultivate learning through...emotional and aesthetic...development of our diverse community.”

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

Coming back to campus this fall, I am rejuvenated and excited to teach again. As a result of my travels, I find that my mind and my heart are more expansive, especially toward my students and in particular my brown students. Whereas prior to this sabbatical I wasn’t that confident in my own Mexican identity, I now feel a solid confidence in who I am as a Mexican American thanks to my travels through Mexico and my deepened appreciation of my culture. Along with all of this comes a sensitivity and a deeper appreciation of the Mexican culture and because I want to become more involved in the inclusion of all groups on our campus, I have signed up to be in the Courageous Leadership program that starts this month and ends next Spring. This sabbatical has given me the passion to help more and be more engaged in my community.

2. How did this sabbatical leave benefit students in my discipline?

I learned to accept my identity and love my identity as Mexican, and when I see my students, I am filled with love as well. Also, all of my students, but especially my students of color, can see their stories in my story and have confidence that if I can do it, they can do it. This semester, I had them write personal essays on their education and the hindrances in their education. I gave an example of myself and my own background, being raised in a bilingual

home, facing racism in school and how I didn't do well in school. But through education and the love of learning, I triumphed and earned my PhD in English Literature at UC Berkeley. In showing them where I came from, which is similar to where they come from, I enabled them to express their hardships as well as their dreams.

3. How did this sabbatical leave benefit my department?

I feel more confident in who I am, and I feel more than ever that I am a team player, especially in terms of DEI. For instance, as mentioned above, I have joined the Courageous Leaders Academy. Also, because of this newfound confidence in myself, I have less social anxiety and really enjoy the company of my wonderful colleagues more. My colleagues now, I believe, can better see how exploring students' personal cultures in essay writing can help students find their voice in writing. I coordinate and host an English faculty reading every spring entitled *The View from Here*, and I will be reading excerpts from my essays to the faculty and students and discussing my sabbatical project as one that shows the richness and beauty of Mexican culture. Already I believe that the stories and insights I have shared with the faculty at my department meeting and in informal conversations have demonstrated that their Latinx colleagues, staff and students have rich stories to share about their culture.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

This project is firmly aligned with our SRJC vision which aspires to be, "inclusive, diverse...[and] engages the whole person." The personal essay is a creative essay. It is a genre that enables a person to speak their truth in a creative and genuine way. It is also an intellectual process, requiring the writer to think in the essay form and to follow logical progressions of self-reflection, as well as reflection of their environment. Perhaps above all, this project aims to cultivate emotional and aesthetic development in our writers, in support of the SRJC's mission.

F. Abstract for Board Report Summary

Carmen Castillo traveled to four areas of Mexico: Mérida, the capital of the Yucatan, Oaxaca, Mexico City and Puebla. She wrote three creative non-fiction essays (personal essays) about her impressions of Mexican art and culture through the lens of her own Mexican American assimilated identity. Through this process she deepened her love of her Mexican culture and identity, which is to say of herself, and has shared it with her students by compiling a reader for them to learn about the genre of the personal essay. This reader is an example of how students in our Latinx community can take pride in their unique Latinx voice and its varied richness, despite the underrepresentation of their voice in academic scholarship. It is a reader that models to all students that good scholarship is authentic, thoughtful and well-crafted, and it is a way to see into lives of all communities, and in this case especially the Latinx community. The project was presented to the English department colleagues at a department meeting to demonstrate the power of the voices of our Latinx students if they are encouraged to speak with pride and authenticity about their culture.

G. Appendices

-Three personal essays

Sabbatical Leave Report

A. Applicant

Name: George Sellu

Department: Agriculture and Natural Resources

Type of Leave: Project

Leave Dates: Spring 2022 and Spring 2024

B. Purpose of Leave

The purpose of my sabbatical leave was to write a textbook on the principles and practices of hemp cultivation in the United States. Currently there is no appropriate textbook for teaching the basic principles for hemp cultivation. Instructors are using materials from different textbooks that in most cases are designed for other crops or for students in graduate programs. This textbook was written for community college students, and it will provide enough practical skills to prepare students for entry level jobs or advanced studies in hemp agriculture. I have submitted a complete draft of the textbook.

C. Leave Objectives

1. Reviewed five hemp related textbooks and at least 15 research articles and online publications from the University of Kentucky and University of Vermont. Revised the Course Outline of Record (COR) for Specialty Crop Production (SUSAG 119) to cover most of the content in the textbook/reader. Completed a detailed outline of chapters for the textbook/reader.
2. Developed an organized map of topics in the textbooks and articles reviewed to chapters in the textbook/reader.
3. Contacted several farmers from four states to plan interviews and visits. I visited two farmers in Northern California, two farmers in Eastern Colorado, one farmer in New York and one farmer in Morgan, Vermont (a total of six farmers). During these visits, I conducted semi-structured interviews with farmers and the information I gleaned expanded my understanding of the hemp industry.
4. Contacted hemp researchers from three leading institutions: University of Vermont (Dr. Heather Darby), Cornell University (Prof. Larry Smart), Dr. Bob Pearce (University of Kentucky). The researchers shared publications and videos of hemp talks they have given. I visited Dr. Heather Darby at University of Vermont, and I did a tour of their hemp research sites.

5. Completed the first draft of the textbook/reader. Waiting to get feedback from the editor. The manuscript will be revised and shared with my colleagues at our November department meeting.

D. Narrative

Santa Rosa Junior College (SRJC) launched the first Hemp Agriculture Program in the entire state of California in 2019. Before 2018, hemp had not been cultivated in the United States since the 1930s. As a result, there has been a major gap in the knowledge base of farmers and our labor force regarding hemp cultivation. At SRJC, the hemp agriculture certificate requires students to complete courses in Plant Science, Soil Science, Horticulture and Sustainable Agriculture. It is expected that students will be able to acquire basic understanding of the principles and practices of hemp cultivation through class activities and lectures in the aforementioned courses. However, there are no specific textbooks to introduce students to foundational concepts related to hemp cultivation in a consistent and reliable manner for all instructors teaching the agriculture courses that are required for the hemp certificate. The reader/textbook has 10 chapters which provide a strong foundation for students and instructors. The content covered in these ten chapters cut across all the required courses for the hemp certificate. The reader/textbook is also closely aligned with the COR for SUSAG 119 (Specialty Crop Production). Although the development of the COR for SUSAG 119 was not part of my sabbatical project, after reviewing some of the literature online from research universities and visiting some hemp farmers, I was able to identify foundational skills that are needed for entry level jobs in the hemp industry. The current COR for SUSAG 119 was informed by my research in Spring 2022 and hemp farm visits. The reader/textbook covers the topics and scope of the SUSAG 119 and additional content that is covered in other courses in the hemp certificate program.

During my initial visit to a couple of farms in Eastern Colorado in June 2022, two farmers informed me that they had hired consultants to help them with their hemp cultivation. When I did a follow up in September 2022, one of the farmers had experienced a total crop loss. One of the farms I visited in Long Island, New York in July 2022 also experienced a total crop loss. This farm in New York had also hired a consultant. The farmers I visited in Colorado were wheat and corn farmers and the farmers in Long Island, New York were vegetable farmers who were venturing into industrial hemp cultivation. I had the opportunity to meet with the consultant for one of the hemp farms in Long Island, New York. Based on my conversation with this consultant and several phone conversations with the hemp farmers in the five states, we concluded that while these consultants had a lot of informal experience with the crop, they lacked some of the skills for cultivating and managing medium to large-scale indoor and outdoor hemp farms. More importantly, most of the experiences of some of these highly paid consultants were limited to indoor cultivation of a couple hundred plants and they were attempting to manage operations with several thousand plants. I believe that the lack of experience in outdoor cultivation practices was also a major challenge for some of these farmers. One of the farms I visited in Morgan, Vermont in July 2022 had to destroy their entire crop because the THC level in their flower crop exceeded the legal 0.3 percent threshold. The reason for this high THC was associated with the lack of experience in selecting the appropriate genetic for the climate in Morgan, Vermont. Adverse outdoor weather conditions could increase plant stress which leads to higher levels of THC production especially for unstable seeds. Consultants or farmers who are not familiar with

outdoor cultivation practices and genetic selection for this crop may not be successful. It is for this reason that I dedicated an entire chapter in this textbook/reader to site selection, breeding and genetics (chapter 3). Furthermore, I dedicated an entire chapter on outdoor cultivation methods/practices including site selection and cultivation (chapter 6). There is also a chapter on indoor (controlled environment cultivation). In Vermont, I found that one of the farmers that lost most of his crop did not have the expertise to operate his new greenhouse nor did he have a qualified group of employees to operate the facility. I believe that separating these two types of cultivation practices (indoors and outdoors) will provide a stronger foundation for students to work in the industrial hemp industry.

Since students in the hemp certificate program are not expected to take the required courses in any specific sequence, faculty teaching some of the required courses for the hemp program could use the reader/textbook as a resource to help better contextualize hemp cultivation within their courses.

In Horticulture (Hort 70, Hort 72), for example, students are expected to understand propagation techniques and the materials and conditions required for hemp cultivation in Controlled Environments and in outdoor environments. In Hort 72, students study the best practices for greenhouse management. In this reader/textbook, I have dedicated two chapters to help instructors and students understand how to manage environmental factors and equipment to enhance the growth of hemp in a greenhouse. This reader provides an in-depth understanding of the practices, materials and conditions required for cultivating hemp in both indoor and outdoor environments. I believe that this reader/textbook would help instructors better integrate best practices for hemp cultivation within their lectures and lab activities.

In our plant science courses (AGRI 20, AGRI 60), students are expected to understand ethnobotany, basic plant physiology, plant selection, breeding, consideration for growing conditions, irrigation, nutrition and pest and disease management. In this reader/textbook, I have dedicated three chapters to the uses of hemp, selection/ breeding and agronomic practices for hemp cultivation. In addition, I dedicated two chapters in the reader/textbook (Chapter 8 & 9) to common pests and diseases and how to manage them. It will be difficult for instructors who are not familiar with hemp cultivation to be able to contextualize common pests and diseases in hemp. This reader/textbook provides an easy-to-read guide on identifying and managing common pests and diseases.

In our Sustainable Agriculture courses (SUSAG 50) students study the principles and practices of sustainability and regenerative agriculture. In the last chapter (chapter 10) of the reader/textbook, I have provided in-depth discussion and examples of sustainable uses of hemp. The uses include water use efficiency, phytoremediation, bioplastics and carbon sequestration. These uses of hemp are not covered in a traditional sustainable agriculture textbook. I believe that this reader will enhance learning for hemp agriculture faculty and students.

In order to complete this textbook/reader, I had planned to interview farmers in the top five hemp producing states. However, when I started my research in Spring 2022, I found out that the top hemp producing states differed based on the type of product (flower, fiber, grain or dual crop). For example, California is one of the top five states for flower hemp cultivation, but it is not in the top ten states in terms of total acreage cultivated. Furthermore, I found out during Spring

2022 that, with the exception of Kentucky, the states that had advanced hemp research programs were not the top hemp producers in the United States. As a result, I developed a new list of five states (California, Colorado, Kentucky, New York and Vermont) to visit farmers and researchers based on the type of hemp product, cultivated acreage and research programs.

I visited Vermont for four days in Spring 2022 and I met with Dr. Heather Darby who directs the Hemp research program at University of Vermont. During my visit I toured their research greenhouses and their field research sites. In addition, I was introduced to two hemp farmers in Morgan Vermont during my visit. I made a follow up visit with one of the farmers in Vermont in July 2022. During my two visits to Vermont, the researchers shared access to hemp research publications and I visited and interviewed one farmer. Most of the publications from University of Vermont that I reviewed are now available on the Hemp Agriculture program at SRJC page for our faculty and students. The information I received from these farmer interviews have helped inform the content of this reader/textbook.

During the Summer of 2022, I visited Professor Larry Smart, head of hemp research at Cornell University. Professor Smart is one of the leading voices on hemp breeding and genetics in the United States and he is an advisor for United States Department of Agriculture on the industrial hemp. He helped develop the testing protocol for industrial hemp in the United States. During my visit I had the privilege of visiting labs and research greenhouses that were involved in hemp breeding experiments. Those experiences informed the genetics and propagation section of this reader/textbook. I was also trained on sample collection and testing practices for industrial hemp using the United States Department of Agriculture (USDA) sampling protocol that was developed by Prof. Larry Smart and his team. I have been able to share my experience in sampling and testing hemp with my colleagues, Shone Farm staff and the local agriculture commissioner's staff. I believe this skill is valuable for all hemp farm operators.

In the Summer of 2022, I also contacted Dr. Bob Pearce who directs the Hemp research program at the University of Kentucky. I was unable to meet with him in person, but we had several phone interviews about his program, and he placed me in contact with his research coordinator. The coordinator gave me a tour of some of their research sites and one of the largest fiber hemp processing plants in the nation. I also have access to a handful of their publications which have informed this reader/textbook, and I have published some of them on the SRJC Hemp Agriculture program website. While I have not been able to use all the resources I received from University of Kentucky, I believe they have provided me with a lot of data to help develop future courses.

I shared the COR for SUSAG 119 and the outline for the reader/textbook with the department. I have not completed the department presentation. I have sent a copy to my department chair. We have not shared the entire document because the Hemp Agriculture program is going through a revitalization. Our goal is to share the document with affiliated faculty after the revamping of the program.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

As the program coordinator for the Hemp Agriculture Program, the reader allows me to ensure that there is currency and consistency in the curriculum that we teach in the program. This project has given me the opportunity to build relationships in the hemp industry that would continue to inform how we prepare students for the workforce.

2. How did this sabbatical leave benefit students in my discipline?

This reader/textbook I have developed provides current practices for hemp cultivation in the United States, and it prepares students for the workforce. The case studies provided in some of the chapters will help students engage with potential real-world scenarios of challenges in the hemp industry. The reader/textbook will be publicly available at zero cost, and it will be updated annually to reflect changes in the industry.

3. How did this sabbatical leave benefit my department?

The reader/textbook I have developed will enhance the knowledge of all instructors teaching courses that are required for the hemp agriculture program. It will ensure that there is currency and accuracy in hemp related instruction. I believe this reader/textbook makes it easier for other program coordinators to contextualize hemp into their existing course. I believe that this reader/textbook would increase the number of students who enroll in the hemp agriculture program.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

I believe my project aligns with the strategic plan goals and objectives of SRJC. The course I developed during my sabbatical provides an opportunity for robust teaching and learning in hemp education. The reader/textbook is structured in such a way that it provides requisite skills that improve the employability of our graduates. The reader/textbook could be used for professional development for instructors who teach hemp related courses. This project has helped me build strategic alliances with our local employers.

F. Abstract for Board Proposal Summary

George Sellu, conducted research on several university hemp research programs in the United States. He visited and interviewed several hemp farmers in five states and used the data from his research, visits and interviews to revise an existing course, Specialty Crops (SUSAG 119) to include key concepts for an introductory course in industrial hemp cultivation. He also updated the Hemp Agriculture Program webpages with current literature and relevant documents related to industrial hemp policies, economics and cultivation practices in the United States. Finally, he developed a reader/textbook that could be used to teach SUSAG-119 and serve as a valuable resource for faculty and students associated with the Hemp Agriculture Program.

G. Appendices

[Link to the SUSAG 119 Course Outline](#)

[Link to the SRJC Hemp Agriculture Website](#)

[Link to the University of Vermont Hemp Research Publications](#)

[Link to the University of Kentucky Hemp Research Publications](#)

[Link to the Cornell University Hemp Manuals & Research Publications](#)

[Link to the US. Farm Bill](#)

Farmer Interview Transcript

Textbooks

Boulloc, P., Allegret, S., & Arnaud, L. (2013). Hemp Industrial Production and Uses. Publisher: CABI.

Bocsa, I & Karus, M. (1998). The Cultivation of Hemp: Botany, varieties, cultivation and harvesting. Publisher: Hemptech.

Cloyd, R.A. (2016). Greenhouse Pest Management. Publisher: CRC Press

Dhondt, F. & Muthu, S.S. (2021). Hemp and Sustainability. Publisher: Springer.

Hobbs, J. (2019). American Hemp. Publisher: Skyhorse.

McPartland, J.M., Clarke, R.C., & Watson, D.P. (2000). Hemp Diseases and Pests: Management and Biological Control. Publisher: CABI

Sabbatical Leave Report

A. Applicant

Name: Jan Kmetko

Department: Chemistry and Physics

Type of Leave: Independent Study

Leave Dates: Fall 2024

B. Purpose of Leave

During my one-semester sabbatical leave, I made two trips to the Mount Wilson Observatory (MWO, Mount Wilson, CA), to update my knowledge of astronomy, to learn the available instrumentation and data-processing techniques at the telescopes of the observatory, and to prepare curricular contributions to be used for teaching at the workshops of the Summer Observational Astrophysics Retreats (SOAR). I have worked with several staff members of the Observatory to commission one of their telescopes for use in the Retreats. In preparation for becoming a regular volunteer instructor in the summers, I have developed a collaboration between MWO and SRJC, including efforts at recruiting SRJC students of astronomy, astrophysics and physics to participate in these workshops.

C. Objectives

1. I have reviewed a bibliography concerning the background information for the instrumentation and data-processing techniques used in the SOAR workshop, including current instructional topics, manuals regarding the telescope control and equipment, and manuals concerning data analysis software.
2. During my two visits at MWO, I helped commission a telescope for use in the Program and learned how to operate it. I collected and analyzed a sample light curve from a variable star.
3. I developed a curricular unit on astrophotometry. I have compiled a set of interactive simulations and exercise questions to introduce the topic to students and prepared an instructional manual that guides students through the analysis of data collected on the variable star. These manuals will be used in teaching the SOAR workshops in the summers.
4. I plan to present a talk on professional slides or a poster to present an overview of the SOAR program at the SRJC PDA, so that my colleagues can help encourage SRJC students to apply for admission to that Program.

D. Narrative

The SOAR Workshop at MWO provides its student participants with an opportunity to learn techniques in observational solar and stellar astronomy, including access to sophisticated instruments to collect, analyze and report data. Just before the start of my sabbatical, the Observatory decided to move the future summer activities of this Program to a different telescope on campus. I have been tasked to prepare this telescope for operation in the summers. This news presented the perfect opportunity for me to complete the objectives of my leave, to learn how to operate the instruments in a foundational way. During my two visits, I upgraded the telescope control platform, upgraded the equipment interface and drivers, performed maintenance and polar-alignment of the mount, measured the periodic error of the mount, collected and prepared a reference pointing model, installed and tested on and off-axis guiding systems, and rebuilt the optical train with new cameras. After completing the calibration tests, I have collected and analyzed a dataset that is representative of the kind of projects students will do in the summers. Finally, I prepared instructional manuals that guide students through the theoretical and practical knowledge on how to analyze light curves of stars they will collect at this telescope. During my leave, I have learned how to do professional astronomy.

Objective 1: I reviewed the outline of topics and projects covered in the summer workshops. I also read through (and consulted throughout) the background information for the instrumentation and data-processing applications. The list of curricular topics and the list of the instrument and application manuals that I have upgraded and learned to use is included in the Appendix.

Objective 2: During my two visits at MWO, I was tasked to upgrade and prepare the telescope at the new site for the workshop activities in the summers. I upgraded the focuser and filter wheel adapter from RS-232 to USB protocol, including designing and 3D printing a custom enclosure for the electronics board. Further, I designed and 3D printed camera holder and clamping systems for two different refractor guides. Next, I installed the upgraded instruments on the optical train. On the software side, I have learned and installed the ASCOM technology, a platform that provides universal standards for communication among various astronomy applications. Finally, I have installed and learned how to use the latest image sequencing software (N.I.N.A) and autoguiding software (PHD2) on the acquisition computer.

Objective 3: After configuring the telescope for photometric measurements and to test the upgrades, I have collected a light curve of a star SZ Lyn. This star is a high amplitude δ Scuti star, a radial pulsator showing asymmetric light curve (steep ascending branches). The star alternates between getting bright and dark in the three color RVB filters with a period of about 3 hours. Astronomical measurements like these examples are suitable for students to observe during the summer workshops. Based on these preliminary data, I have prepared curricular materials needed for students to succeed in the workshops.

Objective 4: I have spoken with my colleagues in the SRJC Earth and Space Sciences to schedule a presentation that summarizes the opportunities and my findings of the SOAR program at MWO.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

The professional engagement with the SOAR staff allowed me to gain an in-the-field understanding of sophisticated instrumentation and its relevance to topics that I teach in my service area, allowing me to provide more context-based instruction at SRJC.

2. How did this sabbatical leave benefit students in my discipline?

I have involved SRJC students in independent studies in astrophysics, a topic directly related to my sabbatical project for which I gained additional expertise. Further, I will continue to encourage SRJC students to apply to the SOAR Program, to gain extraordinary professional experience complementing their academic preparation.

3. How did this sabbatical leave benefit my department?

I plan to present the knowledge learned of recent topics in astronomy and astrophysics and my sabbatical outcomes to my colleagues, with the emphasis that our students are welcome to apply for the summer workshops under my mentoring. Providing professional opportunities for our students may increase their chances of successful academic outcomes and may increase the number of physics or astrophysics majors in our department.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

Having a long-standing collaboration with the staff of the Mount Wilson Observatory will open the door for the exchange of cutting-edge ideas among faculty, promote professional growth, foster critical thinking, and provide professional opportunities for our students, supporting the focus on preparing students for transfer, by providing opportunities with early career skills, and by improving students' foundational skills.

F. Abstract for Board Report Summary

Jan Kmetko developed a long-term collaboration with the staff of the Summer Observational Astrophysics Retreats at the Mount Wilson Observatory, Mount Wilson, California. During his Fall sabbatical, he spent time at the Observatory to learn the relevant instrumentation and techniques and prepared the curriculum for his volunteer teaching at these retreats in summers. This experience gained him currency in the field, expertise to bring back into his teaching at SRJC, and to provide mentoring and professional opportunities to SRJC students

G. Appendices

The following documents have been submitted with this report in an electronic format:

- Bibliographic information with references to
 - Review of subject matter in astronomy textbooks

- Review of technical information about astronomy hardware (operation of telescope, telescope mount, focuser, filter wheel, camera)
 - Review of astronomy guides for telescope control and image processing software
- Autodesk Inventor files of designed components for
 - Electronic component storage box
 - Tube rings and clamps for the guide scope
 - Attachments for cameras
- Curricular materials for teaching summer workshops
 - Student workbooks and guides for photometric analysis of lightcurves that can be collected with the telescope I configured during my sabbatical
 - Student workbooks for providing conceptual understanding of concepts of the astronomical analysis of data collected on this telescope

Sabbatical Leave Report

A. Applicant

Name: Jessica Longoria

Department: Counseling

Type of Leave: Course revision and update

Leave Dates: Fall 2024

B. Purpose of Leave

While on leave I revised and updated COUN 96 Disability and Society. The class was inactivated Fall 2021 to allow for an update to the Human Services (HUSV-SWHS) major and the creation of SWHS 96 Co-Occurring Disorders. I prepared COUN 96 Disability and Society for reinstatement through curriculum and articulation. Updates prepared the course for submission as a general education offering and the goal of transferability to the University of California system.

C. Objectives

1. I researched related topics, focusing on advancements in the field, new laws and currency.
2. I updated the course outline of record (COR) for reinstatement and prepared it for the process of articulation to both CSU and UC campuses.
3. I updated Canvas modules to align with course updates and articulation goals.
4. I created a presentation for the Counseling department to share course material.

D. Narrative

Early on in my sabbatical, I had an opportunity to travel to Paris, France. I paid close attention to accessibility options for individuals like myself, who have limited physical disability. I toured the Eiffel Tower, Louvre Museum, Musée d'Orsay, Vedettes de Paris river cruise, as well as the Paris-Charles de Gaulle airport and the San Francisco airport. I was also a customer of Handi-Scooters-Paris, and rented a mobility scooter. The research I gathered was informative and eye opening. Once I returned home, I got to work gathering my sources, both experiential and printed before updating the course.

Recent years have seen significant changes in societal attitudes and norms, the disability civil rights movement, institutional responsibilities and finally legislation guaranteeing individuals with disabilities the right to full participation in our society. Counseling 96 covers the experience of the Disabled in the United States. It was on hiatus and in need of revision for the sake of currency.

Objective 1: As the Americans with Disabilities act has evolved and been amended, focus involved a review of textbooks and materials on related topics for relevance and currency. Examples included new legislation, court decisions and articles as well as viewing Disability Studies courses at other colleges (Appendix A). I conducted research reviewing local businesses, businesses abroad and social networking sites on topics related to accessibility and disability awareness. I focused on new trends and best practices in the field, generating a source abstract of my findings (Appendix B), (Appendix C).

Objective 2: There was a need for this class to exist in the offerings at Santa Rosa Junior College and since there have been changes in regard to rights for individuals with disabilities, an update to the course was necessary. I updated the COR, reviewing course content and learning objectives to include currency within the field of Disability Studies (Appendix D). Next, I updated the syllabus (Appendix E). Soon there will only be one general education path for transfer. Organizing this class for UC transferability is imperative as the college prepares the new general education pattern, CalGETC.

Objective 3: I updated the course shell. This involved a review of Canvas modules to align with course revisions, organizing lecture content, written assignments, exams and quizzes. Modules are formatted consistently, applying universal access standards.

- I created lectures and lessons based on my research.
- I updated current course materials, such as the syllabus.
- I created new written assignments and projects based on changes.

Objective 4: I created a slide presentation for the Counseling department to share course material to be delivered during a department meeting Spring 2025.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

My background is in Multicultural Counseling and a commitment to social justice through higher education. As such, diversity extends beyond race and ethnicity to include other groups, such as ability/disability and my goal as faculty is to increase awareness around ability and disability. As a counselor I teach classes and putting energy into revising COUN 96 strengthened my skills as faculty.

2. How did this sabbatical leave benefit students in my discipline?

I believe students benefit from learning Disability Awareness, which will inform them beyond their college experience. This course can be taken by anyone, as it is transferrable to the California State University system and the units count towards an associates degree. As the revision moves through curriculum it will be eligible for transfer to the University of California system as well.

3. How did this sabbatical leave benefit my department?

Faculty in the counseling department have the opportunity to teach COUN 96. Offering this course supports the college diversity, equity, inclusion and accessibility (DEIA) efforts, which holds extreme importance to the Counseling department. Soon there will be only one general education path for transfer, CalGETC. Organizing this class for UC transferability is imperative as the college prepares the new general education pattern.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

As the college increases diversity in the form of classes offered and cultural events held, I saw a need for Disability Awareness represented in course offerings and am happy to see Ethnic Studies as a major and general education. Ethnic Studies, as it is related to Diversity Studies, includes topics on race and ethnicity. However, Diversity Studies extends to include other disenfranchised groups (LGBTQ+, ability/disability). Offering COUN 96 Disability and Society again supports a proposed Strategic Plan Strategy of offering SRJC programming that impacts all members of our community.

F. Abstract for Board Report Summary

As a need for Disability Awareness curriculum is evident, Counseling faculty Jessica Longoria prepared COUN 96 Disability and Society for reinstatement. She spent her Fall 2024 sabbatical reviewing literature, updating the COR and Canvas modules and created a presentation to be delivered to the Counseling department. The course was prepared for submission to curriculum for general education review and to articulation for transferability to the CSU and UC systems. Attention was paid to best practices and applying universal design to the course content. This work adds a new course option for students within the scope of diversity awareness as well as support DEIA within the college.

G. Appendices

Appendix A: Bibliography

Appendix B: List of sites visited touring access standards, home and abroad

Appendix C: List of local business and social networking sites that support disability awareness

Appendix D: Course Outline of Record

Appendix E. Syllabus

Sabbatical Leave Report

A. Applicant

Name: Jocelyn Arild

Department: Disability Resources

Type of Leave: Curriculum Research and Development

Leave Dates: Fall 2024

B. Purpose of Leave

The purpose of the sabbatical was to research and develop a new course on disability and culture. Through this research, I created a Course Outline of Record, syllabus and sample lesson plans for the course that can be taught in the Disability Resources Department. I developed a course that will enable students who are going into many different fields to increase awareness and skills around disability and culture through class readings and guest presentations (in a lecture series format). I have prepared a presentation of the course including a sample lesson plan that I can share with my colleagues.

C. Leave Objectives

1. I researched the topic of intersections of disability and culture in the U.S. I investigated similar courses online, found and read scholarly articles and reviewed one course syllabus from a similar course.
2. Based on my research, I developed a Course Outline of Record and designed a sample syllabus on disability and culture from an intersectional lens.
3. I developed a presentation for my colleagues providing an overview of the course offering on the topic of the intersections of disability and culture, as well as sample lesson plans.

D. Narrative

1. To research and find up to three courses (including those offered in a lecture series format) on the topic of disability and culture (or intersectionality).

I explored colleges and universities that offer intersectional and/or lecture series courses through their websites. I found information online for five different lecture programs on the topics of disability and culture. I reviewed the speaker information, topics included, frequency of the lectures offered and whether they were provided in person, online or both. I also reviewed the flier or advertisements for each of these programs. I then reviewed the formatting of several

Course Outlines of Record at SRJC and obtained a copy of a syllabus from Dr. Tung at Sonoma State University for her Women's and Gender Studies course that is offered as both a class, and lecture series open to the public. I compiled a list of programs that I reviewed online, and developed a Works Cited page. I researched and found six articles on disability and culture that were either written by scholars or were published in peer-reviewed journals. Two of these articles that are not as recent are considered staple readings for the subject of disability and culture. I also identified eight potential books that could be utilized for class assignments and can supplement the guest lecturers' presentations. Five of the books were published in the last ten years, and the other three were copyrighted in the 1990's but share experiences of disability and culture and would provide an interesting perspective for students to consider how things have or have not changed in U.S. society since that time.

2. To develop a Course Outline of Record and syllabus on an intersectional course on disability and culture.

I accessed and reviewed COR's from our college website to ensure that I utilized the most current format and information needed. Using an intersectional theoretical framework, I developed the COR and syllabus for this class on disability and culture.

3. To develop a presentation to my colleagues providing an overview of the course (in a lecture series format) on the topic of intersections of disability and culture and a sample lesson plan.

I reviewed and read about other lecture series offered throughout the U.S. and also found a few abroad. I read about the topics covered and speaker biographies to get a sense of what I wanted to include in the course. I researched scholarly work in this field, and reviewed potential readings for the class. I also utilized this research and readings to consider who I might invite to be a guest speaker that can address intersectional aspects of disability, and how I might be able to offer the most relevant topics for our community and students.

I previously taught a lecture series course at SSU many years ago, and drew on that experience and current similar courses to begin developing this class. Once I had the COR and syllabus developed, I created a presentation for my colleagues and provided an overview of why it is important for DRD to begin offering a class that provides an intersectional look at disability. I then described the structure of the class and created three sample lesson plans to share with colleagues. The sample lesson plans included a potential guest speaker, possible reading materials, a class reflection prompt and reading analysis activity. The sample lesson plans included how intersectionality and disability theories will be woven into the course.

The goals of the sabbatical leave project were achieved, and I was also able to create more lesson plans that I initially committed to completing and created a sample flier for the guest speaker portion of the course. I was successful in brushing up on my research skills and learning more about developing a COR for a GE class. This project also allowed me to think more about how race, gender, sexuality, nation, socioeconomic status, language, religion and more are essential to include in discussions regarding disability.

E. Evaluation Summary

1. How will the objectives of this sabbatical leave enhance my work performance at the college?

This sabbatical leave provided me with an opportunity to deepen my learning and teaching skills. This was my first time designing a GE course from start to finish and it helped me increase my understanding of curriculum processes and teaching design. I am hopeful that this course will be offered in DRD and will positively impact our campus and community. Through research and developing this course, I was able to reflect on my work, gain a deeper understanding of the “isms” (racism, sexism, ageism, et cetera) within disability, and think about changes I want to make to the one-on-one work, and to my own teaching practices so I can provide more informed services to students.

2. How will the objectives of this sabbatical leave benefit students in my discipline?

I believe this a much-needed course for not only DRD students, but ones from across disciplines in the college as disabilities are often unseen and are marginalized. By creating more visibility and sharing information, this will provide validation and support to DRD students. I believe it will also help shape our campus to be more inclusive of DRD students, and what changes need to be made to provide more equity. I believe this class has the potential to improve our campus culture by creating more understanding and empathy for one another. This course will provide a rich learning opportunity to students across several disciplines (such as Nursing, Psychology, Social Work and more where students need to be familiar with intersectional identities.

3. How will the objectives of this sabbatical leave benefit my department?

Disability Resources is in the process of changing the department name to increase access to our services for more students. Creating this class will not only potentially attract students to the Disability Resources Department but will also increase awareness of the intersectionality of disability and culture. By offering a new class on disability and culture, we may be able to attract enrollment and provide a dynamic learning experience to students. I also hope this project will be part of our ongoing work in DRD to create more equity for all students.

4. How does your proposed project address the SRJC Strategic Plan and/or your department’s educational plan?

Through my work, I have been addressing the SRJC Strategic Plan to increase student success and support through my efforts to increase awareness of disability and culture. This course will provide an opportunity to learn from a diverse array of presentations each week in class such as guest presenters (including student panels or faculty/staff from the college), film viewings and classroom discussions, hands on learning opportunities in class activities and more. Classroom presentations and activities will vary semester to semester and can be responsive to current issues in disability and culture. I believe this will address the strategic plan in that it will help create a campus climate where more students feel welcome and become more skilled in understanding the diversity and equity needs of our student body and larger community.

F. Abstract for Board Report Summary

Jocelyn Arild researched and developed a new GE course to highlight the intersections of culture and disability in the Disability Resources Department. The purpose of her work was to increase representation and learning opportunities through the intersectional lens of disability and culture. Jocelyn developed a new course by creating a COR, sample syllabus and three lesson plan examples. Through her work, Jocelyn not only learned more about course design and processes but was also able to reflect and learn more about the intersections of disability and culture and how she may personally improve her work with her students. It is Jocelyn's hope that this course will contribute to creating a more inclusive campus.

G. Appendices

- Research and References:
 - References to other lectures
 - Syllabus and Fliers from similar course
 - Works Cited
- Course Documents:
 - Course of Record Outline
 - Sample Syllabus
 - Sample flier for public lecture series
- Sample Lesson Plans:
 - Class One
 - Class Two
 - Class Three
- Presentation to Disability Resources Dept.

Sabbatical Leave Report

A. Applicant

Name: Kasia Fortunati

Department: Counseling

Type of Leave: Formal Coursework/Independent Study

Leave Dates: Spring 2024

B. Purpose of Leave

In order to improve communication across cultures during counseling sessions and student learning in counseling courses, I improved my Spanish skills by completing three weeks of formal Spanish immersion courses and through daily practice in Spanish speaking countries. My work culminated in the creation of a Spanish vocabulary and phrase guide for use when working with students that I have made available to the counseling department.

C. Objectives

1. Attended formal Spanish immersion instruction in Spanish speaking countries.
2. Practiced and improved Spanish communication through speaking and listening to heritage speakers in Spanish speaking countries.
3. Created a Spanish vocabulary and phrase guide for use with students to share with the counseling department.

D. Narrative

Objective 1: I enrolled in and completed 60 hours of Spanish immersion classes -one week in the Ecuadorian Amazon, and two weeks in Medellin, Columbia. Although my plan had been to complete Spanish immersion courses in the first month of my travel, when I arrived in Ecuador there was a declared state of emergency due to the escape of a drug lord from prison and an armed takeover of a television station. I waited a few weeks until the situation improved, and curfew was lifted for safety reasons prior to traveling four hours into the Amazon. The impact of this delay in instruction was primarily an extension of my stay in South America and having more time than planned to acclimate myself to the region.

First, I spent a week at the Gaia Eco-Lodge in the Amazon, near Ahuano, Ecuador, for the Spanish immersion course through Andean Global Studies. I received formal group instruction for 20 hours that week, as well as eating all meals with our Spanish instructor, who continued to have us practice communicating in Spanish only. There were only two students in the group, so it was very intimate and tailored to our learning needs. As part of this experience, we studied definite and indefinite articles, past tense, future tense, reflexive pronouns, and conjugation of reflexive, regular, irregular, and semi-irregular verbs. 50% of the staff at Gaia Eco-Lodge are indigenous and bilingual in Spanish and Quichua, the language of the indigenous people in the

area (one also spoke English). My Spanish instructor through Andean Global Studies, was born in and has lived most of his life in Ecuador. His first language is Spanish, second is English, and third is German.

Secondly, in Columbia I completed two weeks of Spanish immersion classes in the Total Spanish program, which included 20 hours each week of group instruction. There were three students in my class, so the instruction was still very intimate. In this class, the two other students seemed to be at a higher-level understanding of the past tenses than I. At my request, my instructor provided me with additional work I could complete outside of class to increase my knowledge and use of the past tenses. This was really invaluable to me. We continued to study direct and indirect objects, use of verbs in past, future, and present tenses and learned the subjunctive tense in relation to doubts, hopes, and emotions. My Spanish instructor at Total Spanish, who was born in and has always lived in Columbia, remained my instructor for both weeks. The consistency of having the same instructor for two weeks made Spanish language acquisition my primary focus, rather than also learning the teaching style and expectations of a third instructor. Her first language is Spanish, and second is English.

All three weeks of formal Spanish instruction were highly beneficial and increased my Spanish skills. Although I had already completed SPAN 1, 2, and 3 at Santa Rosa Junior College, I was learning every day even when some information was a review for me. I learned new vocabulary, gained a better grasp of intermediate verb conjugations, and had the opportunity to practice Spanish daily with heritage speakers in a variety of situations. During my first week of instruction, my classmate's Spanish was not as advanced as mine, and while this led to a greater amount of review material for me, it also had the benefit of increasing my confidence in the Spanish I already knew.

Objective 2: I spent just under three months in Ecuador, Columbia, and Panama where I practiced Spanish in a variety of situations with heritage speakers, primarily communicating in Spanish, as most people I interacted with spoke very little or no English. Living amongst those of another culture and speaking Spanish daily is an efficient way to enhance the knowledge gained from formal instruction in the Spanish immersion course. I was immersed in Latin American life, which included learning techniques for cleaning produce for safe consumption and for treating water to make it potable. Outside of the Spanish immersion classes, I continued to practice in daily life situations, such as conversing with street vendors, obtaining directions, using the Metro, taking my laundry to have it cleaned, taking taxis, reading street signs, going to church, sharing meals and conversation with those who lived in the areas I stayed in, and watching television in Spanish. I explored Latin American culture, seeking out local food, as well as tours and activities conducted in Spanish in Ecuador, Columbia, and Panama, which centered around museums, architecture, music, historical sites, graffiti art, volcanos, waterfalls, and wildlife reserves.

In Ecuador, learning opportunities included canoeing with Spanish speaking guides on the Napo and Arajuno Rivers, preparing Artisanal chocolate using the Quichua method, and visiting the Quichua indigenous village on Anaconda Island where I learned about medicinal plants from their shaman. I went on tours with historical information about the architecture of and art in churches, such as la Basílica del Voto Nacional, Fundación Iglesia de la Compañía, and la Iglesia de la Virgen Santa Agua. I took a tour of old town Quito, where I learned about the historical buildings and government, as well as museum tours in Spanish of Casa Guayasamin Museo and el Museo Initiñan. I also went on tours in Spanish of Cotapaxi National Park, learning about

Mama Tungurahura Volcano and Pululahua Crater. I toured waterfalls and the Agoyan Hydroelectric Dam in Banos, such as Cascada el Manto del Novio and Cascada el Pailón. I also spent time at las termas de Papallacta, and went on a tour of the Mindo-Nambillo Ecological Reserve to learn about wildlife.

In Columbia, I went on the Medellin Comuna 13 Graffiti Tour, where I learned about the long history of violence and what changes have been made to improve the situation, as well as experiencing the music, food, and art of the area. As part of another tour, I learned more about the violence of the past in Inflexion Memorial Park and learned about Utagui graffiti art. I hiked to la Chorrera Waterfall, the largest waterfall in Columbia, where my Spanish speaking guide taught me about native plant life and the negative impact of plants brought to the area on the environment. I toured Museo el Castillo, the Guatapé Market, Museo Antioquia, Museo de Oro, Plaza de Bolivar, the fortress of San Felipe de Barajas, and had a historical tour of Cartegena's Walled City and Getsamani.

Lastly, I spent a week in Panama, where English was more widely spoken on tours to the Panama Canal Museum, the Amador Causeway, the old town of Casco Antigua/San Felipe, and to the Gatun Lake Wildlife Reserve.

Objective 3: I created a Spanish phrase and vocabulary list to use while working with students and shared this resource with the Counseling Department.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

As faculty in the Counseling Department, I spend 30 hours of my work week in student contact with the special populations served by the EOPS, NextUp, and CalWORKs programs. Many of these students are first-generation, Spanish speaking, and/or Latino/a. I provide direct student support through counseling services, and usually teach on overload, or in addition to my counseling hours. In my position, the expected impact is focused mostly on counseling services.

The objectives of this sabbatical leave have enhanced my work performance at the college by improving the quality of SRJC's counseling services, through my improved Spanish language skills. Improving my Spanish skills allows me to be another counselor who is available to provide academic counseling to students in these special populations whose first language is Spanish. This leave provided me with time to translate phrases and words I regularly use in counseling sessions, and in EOPS contract appointments.

2. How did this sabbatical leave benefit students in my discipline?

This sabbatical leave benefits students utilizing counseling services and taking counseling courses who are of Latin American descent on an on-going basis. As a result of this leave, I am able to empathize and communicate with the diverse student population I serve in a more in-depth way than before. Students who are Spanish speaking have access to another counselor who can work with them in their native language to help with their academic planning and to

provide guidance, as well as being able to provide support in Spanish to those who enroll in counseling courses.

3. How did this sabbatical leave benefit my department?

Improving my Spanish language skills benefits the counseling department in making available another counselor who can communicate with students who are most comfortable speaking their native language. The professional education vocabulary needed to provide academic counseling is not standardly covered in college Spanish courses. Having Spanish phrases prepared that explain counseling confidentiality exceptions or ask about a student's goals is extremely helpful to an English-speaking counselor learning Spanish. Having a Spanish vocabulary and phrase guide available also provides the counseling department with a resource document to help counselors better serve the students at a Hispanic Serving Institution like SRJC.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

Increasing fluency in Spanish and interacting with people of Hispanic ethnicity address Goal A of the SRJC Strategic Plan, supporting student success, by enhancing "cultural competency to better serve all student populations with a focus on...the increasing Latino/a population." Additionally, these objectives address Goal C, serve our diverse communities and strengthen our connections, by increasing cultural awareness to better "identify the educational needs of our changing demographics and develop appropriate and innovative programs and services with a focus on the increasing Latino/a population."

F. Abstract for Board Report Summary

Kasia Fortunati completed three weeks of study in Spanish immersion courses and travelled in Ecuador, Columbia, and Panama for a stay of just under 3 months. During this time, she practiced Spanish language skills and increased cultural competency within the field of counseling through Spanish immersion courses and daily-life experiences. She created a list of Spanish vocabulary and phrases and provided it to the counseling department for use as a resource working with students.

G. Appendices

- Letter certifying completion 2 weeks Spanish immersion classes in Columbia
Total Spanish
- Letter/certificate of completion 1-week Spanish immersion class in Ecuador
Andean Global Studies
- Created materials
Spanish vocabulary and phrases resource provided to Counseling

Sabbatical Leave Report

A. Applicant

Kat Ferguson (Valenzuela)

Department: Mathematics

Type of Leave: Research with Course Material Development for Instructors and Students

Leave Dates: Spring 2024

B. Purpose of Leave

In addition to revitalization of my mind and body, I created a bridge between calculus and statistics for students and instructors in MATH 1A, 1B, & 1C. I gained a deeper understanding and appreciation of the calculus underpinning of statistics. These worksheets will show calculus students that many applications and topics in statistics have calculus origins.

C. Objectives

1. Completed: Researched & identified 9 statistics topics that reveal a rich calculus origin (9 because there are 3 activities for each MATH 1A, 1B, and 1C course).
2. Completed: Developed an activity for each topic so that instructors may use them in their MATH 1A, 1B, or 1C classes.

D. Narrative

Objective #1: Research & identify 9 Statistics topics that reveal a rich calculus origin (9 because there will 3 activities for each MATH 1A, 1B, and 1C course).

This research lasted about a month. I began with looking at the course outline or record for each Math 1A, 1B, & 1C to identify topics that would aid in the development of the derivation of different statistical topics. In my research I used Calculus Early Transcendentals textbook by Stewart, 8/e, Statistics: Informed Decisions Using Data by Michael Sullivan III, 6/e, as well as other textbooks used in upper division math courses to give me ideas of topics that would lend themselves nicely to the level of rigor in our calculus courses.

Once I identified the topics and activities in statistics, I thoroughly worked the problems I created. Because I was translating components of each problem into specific parts of each problem on my worksheets, this took most of the time on my sabbatical, about three months. A few of the topics involved more work, and research than other topics. I spent time researching theorems, definitions, and making sure the process was logically sound. There were several hidden, requisite questions that were necessary to answer in almost every problem. I made sure

to flesh out those hidden gems so that students wouldn't have any misunderstanding or questions when they did the problem themselves. In the end, this approach helped me to develop worksheets that students would be able to follow more easily, and hopefully come away with a deeper understanding of the connection between calculus and statistics.

Objective #2: Develop an activity for each topic so that instructors might use them in their MATH 1A, 1B, or 1C classes.

Once I was finished working the problems, I began crafting the worksheets; this took about a month or two to complete. I tried to make sure to include an explanation, in some cases, to alert the students as to where this topic is in statistics, what it's used for, or why the topic may be important. In some worksheets, where the work and solutions were especially complicated, I meticulously lead the students through the rigorous process of solving or deriving the topic in the worksheet. I did, however, leave opportunities for them to try solving several aspects on their own. These worksheets were also developed to help students learn how to look for the hidden gems described in Objective #1; in particular, when theorems or definitions required some additional rationale before application.

I used Microsoft Word to type up my worksheets, I organized the worksheets by what topic or skill is appropriate for each particular course, and I made sure to have three different topics per calculus course.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college? The expected outcome is the impact on your teaching of the courses.

The worksheets have already provided me an extra resource in teaching my current MATH 1A more efficiently yet thoroughly, and I expect the same for MATH 1B and MATH 1C. These worksheets will give me the ability to demonstrate to students—specifically, in terms of statistics applications—the importance of what they're learning in calculus. These worksheets have also given me the ability to use class time more effectively – as the mathematical write up is already done for me in the worksheets – to provide a richer experience in calculus. These worksheets share several important details and properties that some students take for granted.

2. How did this sabbatical leave benefit students in my discipline? The expected outcome is the impact you might make on the students within your discipline.

It is commonplace for mathematics students to see that what they are learning in calculus can be applied in disciplines beyond mathematics. Statistics is a topic that arguably every student will encounter it gives these students and advantage to see that they are learning skills and tools to dig deep into the underpinnings of statistics. Showing the topics covered in MATH 1A, 1B, and 1C are important in proving fundamental aspects of statistics will empower every student. These worksheets give students the blueprint to make a connection between calculus and statistics. It also gives the students a richer understanding for not just calculus but statistical applications as well.

3. How did this sabbatical leave benefit my department? The expected outcome is the impact you might make on the students and colleagues within your department/cluster.

In the Math Department every faculty member is expected to be able to teach any course we offer; however, there are instructors who haven't taught or have little experience teaching certain courses; in particular, statistics. For these faculty members, my worksheets might assist them in bridging the gap for the students and themselves between calculus (a course that several faculty are familiar with) to statistics (a course not as familiar). This also might help give my mathematics colleagues the confidence and reassurance that statistics isn't such a "scary" topic, and that they have the ability to teach it.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

The project promoted diverse teaching/learning experiences in our math classrooms and improved accessibility to calculus students and calculus/statistics instructors; in particular, those with little experience with the connection between calculus and statistics.

F. Abstract for Board Report Summary

Kat Ferguson developed worksheets for students and instructors in first, second, and third semester calculus that bridges the gap between calculus and statistics at SRJC. The worksheets are intended to promote diverse teaching/learning experiences in our math classrooms and improve accessibility to students or instructors who have little experience with statistics.

Kat's project involved: 1) Researching topics in statistics that rely on calculus to develop. 2) Working out the problems myself to bring forth the necessary calculus underpinnings 3) Create a worksheet that walks the reader through step-by-step in the development of a statistics topic using calculus.

G. Appendices

Click on the title of the worksheet to view.

Math 1A

1. [Estimating the Probabilities for the Normal Curve Worksheet](#)
2. [Proof of \$e\$ and \$e^z\$ Worksheet](#)
3. [Finding Probabilities Worksheet](#)

Math 1B

1. [Connection Between the Gamma Function and Exponential Distribution Worksheet](#)
2. [Estimating the Probabilities for a Normal Curve Worksheet](#)
3. [Link Between Poisson and Binomial Distribution Worksheet](#)

Math 1C

1. [Finding Probabilities Worksheet](#)
2. [Proving the Least Squares Regression Line Worksheet](#)
3. [Proving Area Under Curve is One Worksheet](#)

Applications of Integrals: Probability, Random Variables, and Probability Distributions

First, a Note: The formula for the normal distribution's density function is

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\frac{(x-\mu)^2}{\sigma^2}}$$

where μ is the mean and $\sigma > 0$ is the standard deviation of the distribution.

Now on with Probability, Continuous Random Variables, and Continuous Probability Distributions.

Definitions, Notation, and Examples

SAMPLE SPACE: The sample space, denoted by S , of an experiment (whose outcome is not known in advance) consists of the set of all possible outcomes of the experiment.

EXAMPLE: The experiment is flipping a coin twice. The sample space will be:

$$S = \{(H, H), (H, T), (T, H), (T, T)\}$$

RANDOM VARIABLE: A random variable, denoted by a capital letter like X or Y , is a real-valued function whose domain is the sample space of an experiment.

EXAMPLE: Let X denote the number of heads obtained when flipping the coin twice. Then the possible real-valued "outputs" of X are $\{0, 1, 2\}$. The domain of X is.

$$S = \{(H, H), (H, T), (T, H), (T, T)\}$$

PROBABILITY: For each event in the sample space S there exists a number between 0 and 1, denoted $P(X = x)$, where x is one of the values that X can take on. We say "the probability that X equals x ". Also,

1. $P(X = x)$ is between 0 and 1,
2. The probability of S is equal to 1, and
3. The sum of all of the probabilities (of all possible "simple" outcomes) is equal to 1.

EXAMPLE: The probability of getting two heads, denoted $P(X = 2)$ is equal to

$$\frac{\text{number of ways of getting two heads}}{\text{number of total possible outcomes}} = \frac{1}{4}$$

The probability distribution, or probability histogram, for the random variable X is shown in **Figure 1**. Notice the total shaded area is equal to one. A diagram of how X takes items elements from the sample space into real numbers, and how P takes those elements into real numbers between 0 and 1 is shown in **Figure 2**.

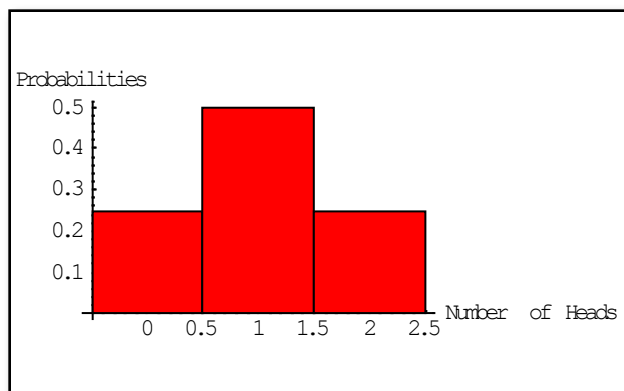


Figure 1: The probability distribution, or probability histogram, for the random variable X

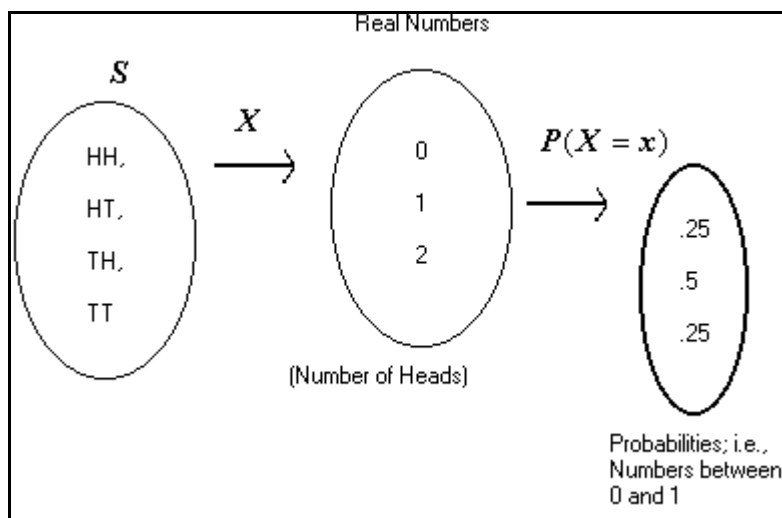
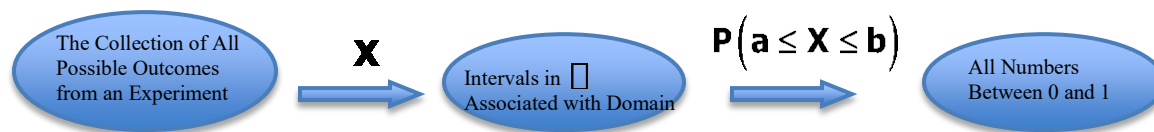


Figure 2

The above example was that of a **discrete random variable**; i.e., one that only takes on a finite or countable number of possible values. Other examples of discrete random variables include the sum of a pair of dice when rolled, the number of eggs a hen lays, or the cost of a randomly selected textbook.

Continuous Random Variables

We will primarily be looking at *continuous random variables*; i.e., ones whose set of possible outcomes (domain) is uncountable (a random variable is a function, usually denoted by X or Y , whose outcome is determined by chance). Examples of continuous random variables include the weights, times, volumes, areas, etc.



Let X be a continuous random variable. Then there exists a non-negative *probability density function* $f(x)$ defined on $(-\infty, \infty)$ so that, for an interval $[a, b]$,

$$P(a \leq X \leq b) = \int_a^b f(x) dx$$

In other words, the probability that X is between a and b can be found by integrating the probability density function between a and b . Note that

$$P(-\infty \leq X \leq \infty) = \int_{-\infty}^{\infty} f(x) dx = 1$$

Also note that, with a continuous random variable X , the probability that X assumes any particular value is equal to zero because

$$P(a \leq X \leq a) = P(X = a) = \int_a^a f(x) dx = 0$$

The *cumulative distribution function* of X is defined to be

$$F(a) = P(X \leq a) = \int_{-\infty}^a f(x) dx$$

Notice that, by the FTC, if we differentiate $F(a)$ we get $f(a)$. In other words, the cumulative distribution function, evaluated at a , is equal to the integral of the density function up to a .

Now, let's look at some examples...

Example: You own a company that manufactures thermometers. You want all the thermometers to be accurate. For example, you want your thermometers to read 0°C at the freezing point of water. You gather a sample of thermometers and find out that some thermometers give readings above 0°C and some give readings below 0°C . Let X represent the temperature in $^{\circ}\text{C}$ of a randomly selected thermometer. From prior (similar) studies, you can assume that the readings of the thermometers are nearly normal. You have a mean of 0°C and a standard deviation of 1°C , therefore your distribution is that of the standard normal distribution, and has a density function of

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2}$$

If we want to find the probability that, at the freezing point of water, a randomly selected thermometer will have a reading of less than 1°C , we would compute

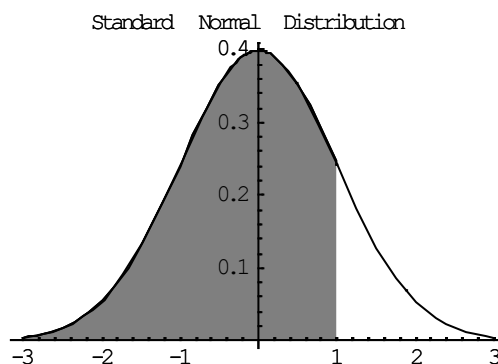
$$P(-\infty < X \leq 1) = \int_{-\infty}^1 \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2} dx \approx 0.841345$$

A graph representing this probability is:

Vertical Axis

Units:

Fraction of
thermometers
measuring x
degrees Celsius,
per degree Celsius



Horizontal Axis Units:

Degrees Celsius

The shaded area is approximately equal to 0.841345. Remember, to get this graph, just graph the density function

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2}.$$

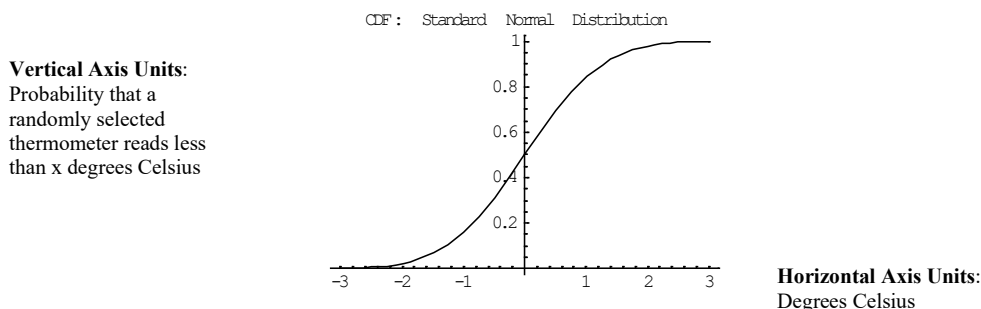
Alternatively, we could have used the CDF and found the same answer. The CDF for X is given by

$$F(x) = P(X \leq x) = \int_{-\infty}^x \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}t^2} dt$$

Evaluating the CDF at $x = 1$ is the same as evaluating integrating the PDF over the interval $-\infty < x \leq 1$.

$$F(1) = P(X \leq 1) = \int_{-\infty}^1 \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2} dx \approx 0.841345$$

Look on the graph of the CDF below. At 1 on the horizontal axis, the function is at about 0.841345.



Now it's your turn to try...

Part A:

Suppose you own a company that manufactures thermometers. You want all the thermometers to be accurate so that you can make lots of cash when you sell them. For example, you want your thermometers to read 0°C at the freezing point of water. One day you gather a sample of thermometers and find out that some thermometers give readings above 0°C and some give readings below 0°C . You have a mean of 0°C and a standard deviation of 1°C , therefore your distribution is that of the standard normal distribution, and has a density function of

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}}$$

The probability is equal to the area of the region between the curve $f(x)$ and the x -axis over a given interval.

1. Set up the integral for $P(-2 \leq x \leq 2)$.
2. Is it possible to find the elementary anti-derivative for e^{-x^2} ? If not, what are other method(s) to evaluate the integral?
3. Estimate the probability that, at the freezing point of water, a randomly selected thermometer will have a reading between -2°C and 2°C . We're going to estimate this area (which ultimately will give you the probability you're looking for) using a Right-hand Riemann sum with 8 subdivisions. First determine what Δx , and your x_i 's are.
4. Set up the Riemann sum using summation notation.
5. Expand the Riemann sum as a sum of terms involving function notation.
6. Evaluate the Riemann sum to estimate the area. Round your estimate to the nearest hundredth.
7. Interpret your solution.
8. Sketch an illustrating the "Riemann rectangles" along with your curve.

Now let's generalize this for a normal probability density function with a given mean, μ , and standard deviation, σ .

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$

The probability is equal to the area of the region between the curve $f(x)$ and the x-axis over a given interval.

Part B:

1. Set up the integral for $P(\mu - \sigma \leq x \leq \mu + \sigma)$.
2. Using a Riemann Sum as a method to evaluate the integral. Estimate the probability within one standard deviation of the mean. We're going to estimate the area (which ultimately will give you the probability you're looking for) using a Left-hand Riemann sum with 8 subdivisions. First determine what Δx , and your x_i 's are.
3. Set up the Riemann sum using summation notation.
4. Expand the Riemann sum as a sum of terms involving function notation.
5. Evaluate the Riemann sum to estimate the area. Round your estimate to the nearest hundredth
6. Interpret your solution.
7. Sketch an illustrating the "Riemann rectangles" along with your curve.

Part C:

1. Find the first derivative of $f(x)$.
2. Find the second derivative of $f(x)$.
3. Find the critical number(s). *Recall: critical points are x-values such that $f'(x) = 0$.*
4. Use the Second Derivative Test prove the concavity of $f(x)$ on $(\mu - \sigma, \mu + \sigma)$.
5. Determine the concavity of $f(x)$ on $(-\infty, \mu - \sigma)$.
6. Determine the concavity of $f(x)$ on $(\mu + \sigma, \infty)$.
7. Using the information found in the previous parts determine if there are any inflection points. Explain and justify your reasoning.

*Recall the definition of an inflection point in section 4.3. A point P on a curve $y = f(x)$ is called an **inflection point** if f is continuous there and the curve changes from concave upward to concave downward or from concave downward to concave upward at P .*

[Click to go back to Appendices](#)

When studying probability, we often refer to experiments. An **experiment** (also known as a **trial**) is a procedure that can be infinitely repeated and has a well-defined **set of possible outcomes**, determined by chance, which is called the **sample space**.

For an **experiment to be binomial**, it must have the following properties:

1. The experiment consists of a fixed number of “Bernoulli trials”; i.e., trials that result in either a “success” or a “failure”.
2. The trials are identical and independent and therefore the probability of success remains the same from trial to trial.

RANDOM VARIABLE: A discrete random variable, denoted by a capital letter, like X or Y , is a real-valued function whose domain is the sample space of an experiment (and whose outcome is determined by chance).

EXAMPLE: The experiment is flipping a fair coin twice. The sample space will be:

$$S = \{(H, H), (H, T), (T, H), (T, T)\}$$

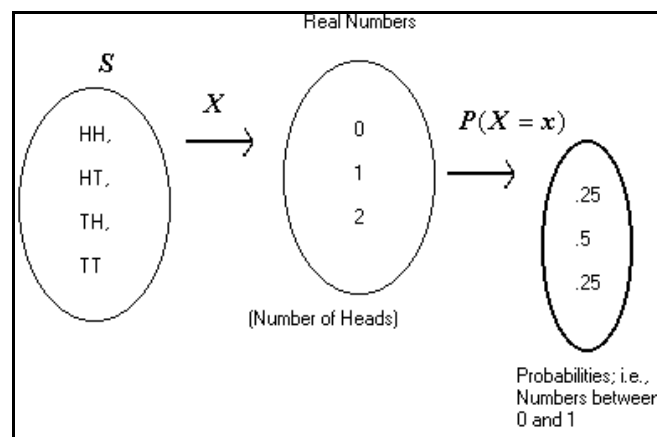
Suppose the random variable X denotes the number of heads obtained when flipping the coin twice. The possible real-valued “outputs” of X are $\{0, 1, 2\}$. The domain of X is

$$S = \{(H, H), (H, T), (T, H), (T, T)\}$$

PROBABILITY Density Function: For each event in the sample space S there exists a number between 0 and 1, denoted $P(x) = P(X = x) = f(x)$, where x is one of the values that X can take on. We say “the probability that X equals x ”. Also,

1. $P(x)$ is a real number between 0 and 1,
2. The probability of S is equal to 1, and
3. The probability of the union of n mutually exclusive events is equal to the sum of each of the probabilities of each event.

EXAMPLE: A diagram of how X takes elements from the coin-flipping sample space from above, into nonnegative integers, and how P takes those elements into real numbers between 0 and 1 is shown:



BINOMIAL RANDOM VARIABLE

Let X denote the number of successes in a binomial experiment. Then X is a binomial random variable. Since the experiment is binomial, then the probability of x “successes” out of n trials is given by:

$$P(x) = P(x \text{ successes out of } n \text{ trials}) = \binom{n}{x} p^x (1-p)^{n-x}$$

Where

- n denotes the fixed number of trials
- x denotes the specific number of successes in n trials
- $P(S) = p$ denotes the probability of a success in one of the trials
- $P(F) = 1 - p$ denotes the probability of a failure in one of the trials

Poisson

The Poisson distribution is a discrete probability distribution that applies to occurrences of discrete events over a continuous interval. The Poisson random variable X denotes the number of occurrences of the discrete event in a particular interval. The interval can be distance, time, area, volume, or some similar unit. Given a mean μ , the probability of the event occurring x times over a given interval is given by:

$$P(x) = \frac{(\mu)^x}{x!} e^{-\mu}$$

The Poisson random variables arise in connection with what are called Poisson processes. Poisson processes involve observing discrete events in a continuous “interval” of time, length, space, etc. For example, we might observe the number of white blood cells in a drop of blood. The number of white blood cells is the number of discrete events; the drop of blood is considered to be the continuous interval. Another example is the number of times radioactive gasses are emitted from a nuclear power plant during a year; the number of emissions is the number of discrete events and one year is the continuous interval.

In Math 1B you will learn the skills necessary to prove that as n grows without bound the Binomial is equal to the Poisson distribution. In order to do so you also need a fundamental fact you will prove in this worksheet.

Part A:

Suppose $f(x) = \ln(x)$.

1. Find $f'(x)$.
2. Find $f'(1)$.
3. The limit definition of a derivative at a point is defined as,

$$f'(a) = \lim_{h \rightarrow 0} \frac{f(a+h) - f(a)}{h}$$

Using the limit definition of a derivative at a point, the results you found in the first two problems, and properties of logarithms prove that for $a = 1$

$$\lim_{h \rightarrow 0} \ln(1+h)^{\frac{1}{h}} = 1$$

4. Using properties of logarithms rewrite the expression $(1+h)^{\frac{1}{h}}$ with a base of e .
5. Using the information found above show that

$$\lim_{h \rightarrow 0} (1+h)^{\frac{1}{h}} = e$$

6. Given what you proved in problem (5) let $n = \frac{1}{h}$, where n is a nonzero real number. What does the redefined expression $y = (1+h)^{\frac{1}{h}}$ result in?

7. Evaluate $\lim_{h \rightarrow 0^+} \frac{1}{h}$

8. With what was found in problem (6 & 7) we let $n = \frac{1}{h}$ then as $h \rightarrow 0^+$, $n = \frac{1}{h} \rightarrow \infty$. Redefine the limit to reflect this alternative expression for e .

$$\lim_{h \rightarrow 0} (1+h)^{\frac{1}{h}} = e$$

Part B:

Now let's extend this identity to show that $\lim_{n \rightarrow \infty} \left(1 + \frac{z}{n}\right)^n = e^z$.

1. Given

$$\lim_{h \rightarrow 0} (1 + h)^{\frac{1}{h}} = e$$

What should you let n be in terms of h , and z ?

2. Using what you defined in the previous problem what does the expression $y = (1 + h)^{\frac{1}{h}}$ result in?

3. For your defined n find the limit of n as $h \rightarrow 0^+$; i.e., evaluate $\lim_{h \rightarrow 0^+} n$.

4. Given the information from the previous problems. Redefine the limit

$$\lim_{h \rightarrow 0} (1 + h)^{\frac{1}{h}} = e$$

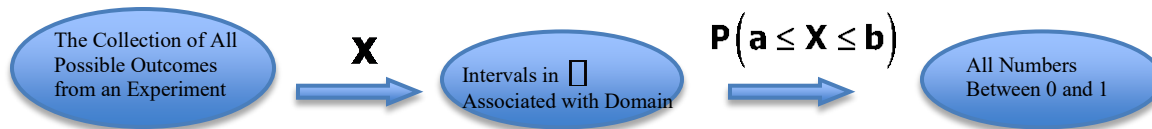
to show

$$\lim_{n \rightarrow \infty} \left(1 + \frac{z}{n}\right)^n = e^z$$

[Click to go back to Appendices](#)

Continuous Random Variables

We will primarily be looking at *continuous random variables*; i.e., ones whose set of possible outcomes (domain) is uncountable (a random variable is a function, usually denoted by X or Y , whose outcome is determined by chance). Examples of continuous random variables include the weights, times, volumes, areas, etc.



Let X be a continuous random variable. Then there exists a non-negative **probability density function** $f(x)$ defined on $(-\infty, \infty)$ so that, for any interval $[a, b]$,

$$P(a \leq X \leq b) = \int_a^b f(x) dx$$

In other words, the probability that X is between a and b can be found by integrating the probability density function between a and b . Note that

$$P(-\infty \leq X \leq \infty) = \int_{-\infty}^{\infty} f(x) dx = 1$$

Also note that, with a continuous random variable X , the probability that X assumes any particular value is equal to zero because

$$P(a \leq X \leq a) = P(X = a) = \int_a^a f(x) dx = 0$$

The **cumulative distribution function** of X is defined to be

$$F(a) = P(X \leq a) = \int_{-\infty}^a f(x) dx$$

Notice that, by the FTC, if we differentiate $F(a)$ we get $f(a)$. In other words, the cumulative distribution function, evaluated at a , is equal to the integral of the density function up to a .

Now suppose X is a random variable with probability density function $f(x)$. We can model the waiting times by using exponential density functions

$$f(t) = \begin{cases} 0 & \text{if } t < 0 \\ \mu^{-1} e^{-\frac{t}{\mu}} & \text{if } t \geq 0 \end{cases}$$

Where μ is the mean waiting time.

An integral is used to compute the expected value (aka, μ) of a continuous random variable X :

$$E[X] = \mu = \int_{-\infty}^{\infty} x \cdot f(x) dx$$

but you will learn about improper integrals in MATH 1B, you do not need to know how to compute the expected value to answer the following questions.

Let's consider a situation...

After the first movie of Pirates of the Caribbean came out in 2003 the ride, Pirates of the Caribbean, saw an increase in the number of people wanting to ride the ride. Let x denote the amount of time it takes to get on Pirates of the Caribbean. On average, it takes 30 minutes waiting in line to get on the ride. The probability density function is given as follows:

$$f(x) = \begin{cases} 0 & \text{if } x < 0 \\ Ae^{-\frac{x}{30}} & \text{if } x \geq 0 \end{cases}$$

1. What's the probability of waiting exactly 20 minutes to ride Pirates of the Caribbean?
2. What's the probability of waiting at most 20 minutes to ride Pirates of the Caribbean?

[Click to go back to Appendices](#)

The gamma distribution in statistics is based on the gamma function in calculus. The Gamma distribution is a distribution that several distributions stem from. Chi-Square distribution, χ^2 distribution, and exponential distribution (see below) are some of these. Therefore, to study statistics, it's necessary to have a sufficiently deep understanding of the gamma function. To familiarize ourselves with the gamma function we'll address the following:

The function

$$\Gamma(\alpha) = \int_0^{\infty} z^{\alpha-1} e^{-z} dz$$

for any $\alpha > 0$ is known as the gamma function.

Part A:

1. Show that $\Gamma(\alpha + 1) = \alpha\Gamma(\alpha)$ for $\alpha > 0$ via integration.
2. Make the best argument you can to convince the reader that $\Gamma(k + 1) = k!$ for integers $k \geq 1$. *Hint: It might help to show for $k = 1$ then $\Gamma(1 + 1) = 1!$, $k = 2$ then $\Gamma(2 + 1) = 2!$, and $k = 3$ then $\Gamma(3 + 1) = 3!$.*
3. It can be shown (in MATH 1C) that

$$\int_0^{\infty} e^{-x^2} dx = \frac{\sqrt{\pi}}{2}$$

Suppose the formula in problem (2) can be used for $k \in \mathbb{R}^+$. Show that $\frac{1}{2}! = \frac{\sqrt{\pi}}{2}$. *Hint: use the " $\alpha\Gamma(\alpha)$ " version for the computation. Also, you'll need a substitution in your integration.*

Part B:

The **gamma density function** (in statistics) rises from the gamma function and is defined by

$$f(x) = \begin{cases} \frac{x^{\alpha-1} e^{-\frac{x}{\beta}}}{\Gamma(\alpha)\beta^{\alpha}} & \text{if } x > 0, \text{ with } \alpha, \beta \text{ positive constants} \\ 0 & \text{otherwise} \end{cases}$$

In particular, with $\alpha = 1$ and with constant mean β , $f(x)$ is known as the **exponential density function**:

$$f(x) = \begin{cases} \frac{e^{-\frac{x}{\beta}}}{\beta} & \text{if } x > 0, \text{ with } \alpha, \beta \text{ positive constants} \\ 0 & \text{otherwise} \end{cases}$$

$f(x)$ is a continuous density function and rises from a continuous random variable X . The expected value of a continuous random variable X is similar to the expected value of a discrete random variable, except an integral (instead of a series) is used to compute the expected value:

$$E[X] = \int_{-\infty}^{\infty} x \cdot f(x) dx$$

4. Find the expected value of the **exponential random variable** X .
5. Recall the variance of a random variable can be found by: $\text{Var}X = E[X^2] - (E[X])^2$. Use this formula to compute the variance of the **exponential random variable** X .

Note that:

$$E[X^2] = \int_{-\infty}^{\infty} x^2 \cdot f(x) dx$$

and don't forget to use what you did in problem (4).

[Click to go back to Appendices](#)

Applications of Integrals: Probability, Random Variables, and Probability Distributions

First, a Note: The formula for the normal distribution's density function is

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\frac{(x-\mu)^2}{\sigma^2}}$$

where μ is the mean and $\sigma > 0$ is the standard deviation of the distribution.

Now on with Probability, Continuous Random Variables, and Continuous Probability Distributions.

Definitions, Notation, and Examples

SAMPLE SPACE: The sample space, denoted by S , of an experiment (whose outcome is not known in advance) consists of the set of all possible outcomes of the experiment.

EXAMPLE: The experiment is flipping a coin twice. The sample space will be:

$$S = \{(H, H), (H, T), (T, H), (T, T)\}$$

RANDOM VARIABLE: A random variable, denoted by a capital letter like X or Y , is a real-valued function whose domain is the sample space of an experiment.

EXAMPLE: Let X denote the number of heads obtained when flipping the coin twice. Then the possible real-valued "outputs" of X are $\{0, 1, 2\}$. The domain of X is.

$$S = \{(H, H), (H, T), (T, H), (T, T)\}$$

PROBABILITY: For each event in the sample space S there exists a number between 0 and 1, denoted $P(X = x)$, where x is one of the values that X can take on. We say "the probability that X equals x ". Also,

1. $P(X = x)$ is between 0 and 1,
2. The probability of S is equal to 1, and
3. The sum of all of the probabilities (of all possible "simple" outcomes) is equal to 1.

EXAMPLE: The probability of getting two heads, denoted $P(X = 2)$ is equal to

$$\frac{\text{number of ways of getting two heads}}{\text{number of total possible outcomes}} = \frac{1}{4}$$

The probability distribution, or probability histogram, for the random variable X is shown in **Figure 1**. Notice the total shaded area is equal to one. A diagram of how X takes items elements from the sample space into real numbers, and how P takes those elements into real numbers between 0 and 1 is shown in **Figure 2**.

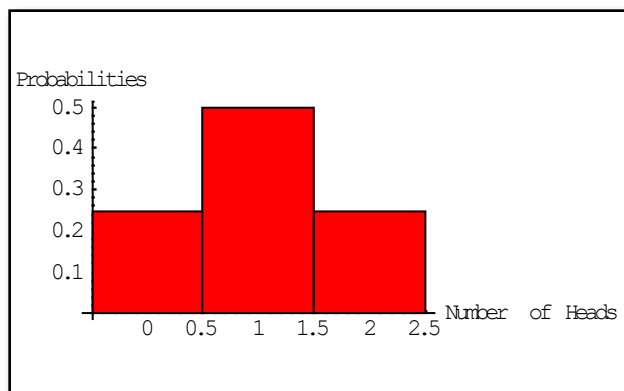


Figure 3: The probability distribution, or probability histogram, for the random variable X

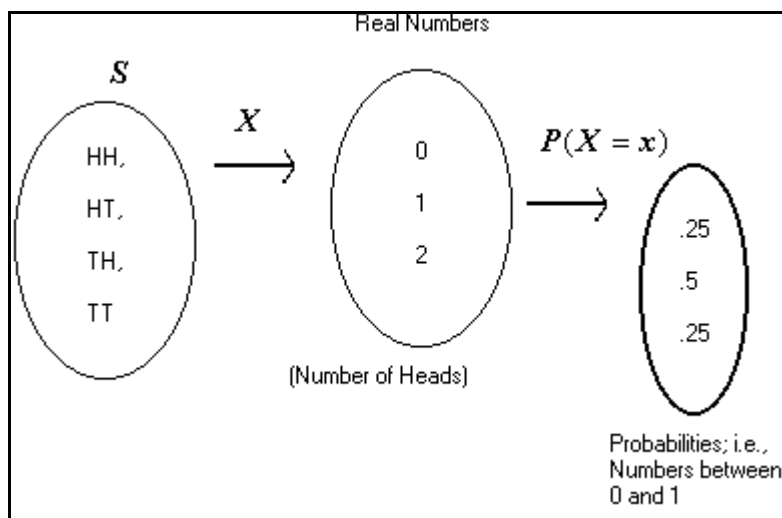
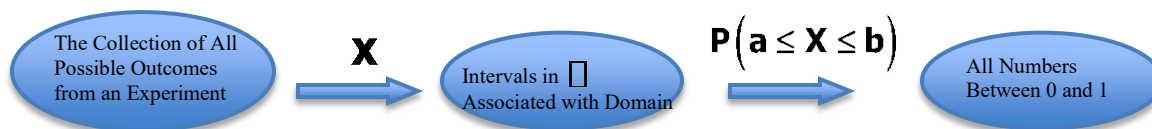


Figure 4

The above example was that of a **discrete random variable**; i.e., one that only takes on a finite or countable number of possible values. Other examples of discrete random variables include the sum of a pair of dice when rolled, the number of eggs a hen lays, or the cost of a randomly selected textbook.

Continuous Random Variables

We will primarily be looking at *continuous random variables*; i.e., ones whose set of possible outcomes (domain) is uncountable (a random variable is a function, usually denoted by X or Y , whose outcome is determined by chance). Examples of continuous random variables include the weights, times, volumes, areas, etc.



Let X be a continuous random variable. Then there exists a non-negative *probability density function* $f(x)$ defined on $(-\infty, \infty)$ so that, for any interval $[a, b]$,

$$P(a \leq X \leq b) = \int_a^b f(x) dx$$

In other words, the probability that X is between a and b can be found by integrating the probability density function between a and b . Note that

$$P(-\infty \leq X \leq \infty) = \int_{-\infty}^{\infty} f(x) dx = 1$$

Also note that, with a continuous random variable X , the probability that X assumes any particular value is equal to zero because

$$P(a \leq X \leq a) = P(X = a) = \int_a^a f(x) dx = 0$$

The *cumulative distribution function* of X is defined to be

$$F(a) = P(X \leq a) = \int_{-\infty}^a f(x) dx$$

Notice that, by the FTC, if we differentiate $F(a)$ we get $f(a)$. In other words, the cumulative distribution function, evaluated at a , is equal to the integral of the density function up to a .

Now, let's look at some examples...

Example: You own a company that manufactures thermometers. You want all the thermometers to be accurate. For example, you want your thermometers to read 0°C at the freezing point of water. You gather a sample of thermometers and find out that some thermometers give readings above 0°C and some give readings below 0°C . Let X represent the temperature in $^{\circ}\text{C}$ of a randomly selected thermometer. From prior (similar) studies, you can assume that the readings of the thermometers are nearly normal. You have a mean of 0°C and a standard deviation of 1°C , therefore your distribution is that of the standard normal distribution, and has a density function of

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2}$$

If we want to find the probability that, at the freezing point of water, a randomly selected thermometer will have a reading of less than 1°C , we would compute

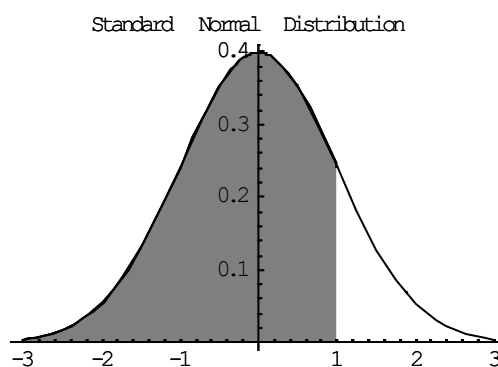
$$P(-\infty < X \leq 1) = \int_{-\infty}^1 \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2} dx \approx 0.841345$$

A graph representing this probability is:

Vertical Axis

Units:

Fraction of
thermometers
measuring x
degrees Celsius,
per degree Celsius



Horizontal Axis Units:
Degrees Celsius

The shaded area is approximately equal to 0.841345. Remember, to get this graph, just graph the density function

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2}.$$

Alternatively, we could have used the CDF and found the same answer. The CDF for X is given by

$$F(x) = P(X \leq x) = \int_{-\infty}^x \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}t^2} dt$$

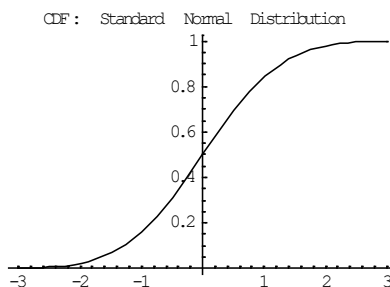
Evaluating the CDF at $x = 1$ is the same as evaluating integrating the PDF over the interval $-\infty < x \leq 1$.

$$F(1) = P(X \leq 1) = \int_{-\infty}^1 \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2} dx \approx 0.841345$$

Look on the graph of the CDF below. At 1 on the horizontal axis, the function is at about 0.841345.

Vertical Axis Units:

Probability that a
randomly selected
thermometer reads less
than x degrees Celsius



Horizontal Axis Units:
Degrees Celsius

Now it's your turn to try...

Part A:

Suppose you own a company that manufactures thermometers. You want all the thermometers to be accurate so that you can make lots of cash when you sell them. For example, you want your thermometers to read 0°C at the freezing point of water. One day you gather a sample of thermometers and find out that some thermometers give readings above 0°C and some give readings below 0°C . You have a mean of 0°C and a standard deviation of 1°C , therefore your distribution is that of the standard normal distribution, and has a density function of

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}}$$

The probability is equal to the area of the region between the curve $f(x)$ and the x-axis over a given interval.

1. Set up the integral for $P(-2 \leq x \leq 2)$.
2. Is it possible to find the elementary anti-derivative for e^{-x^2} ? If no, what are other method(s) to evaluate the integral?
3. Hopefully, you said Taylor Series as one of the methods to evaluate an integral. Estimate the probability that, at the freezing point of water, a randomly selected thermometer will have a reading between -2°C and 2°C . We're going to estimate this area (which ultimately will give you the probability you're looking for) using a Taylor Series with $n = 8$.

We know we could determine the degree of the Taylor polynomial based on the error tolerance using Taylor's Inequality or something similar but for purpose of the worksheets I'm going to define how many terms, n , we are going to use.

4. Set up the Taylor series using summation notation.
5. Expand the summation as a sum of terms involving function notation.
6. Evaluate the Taylor polynomial to estimate the area. Round your estimate to the nearest hundredth
7. Interpret your solution.
8. Sketch an illustration of the Taylor polynomial.

Now let's generalize this for a normal probability density function with a given mean, μ , and standard deviation, σ .

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$

The probability is equal to the area of the region between the curve $f(x)$ and the x-axis over a given interval.

Part B:

1. Set up the integral for $P(\mu - \sigma \leq x \leq \mu + \sigma)$.
2. Using a Taylor Series as a method to evaluate the integral. Estimate the probability within one standard deviation of the mean. We're going to estimate the area (which ultimately will give you the probability you're looking for) using a Taylor Series with $n = 8$.
3. Set up the Taylor Series using summation notation.
4. Expand the Taylor Series as a sum of terms involving function notation.
5. Evaluate the Taylor Series to estimate the area. Round your estimate to the nearest hundredth
6. Interpret your solution.
7. Sketch an illustration of the Taylor polynomial.

[Click to go back to Appendices](#)

When studying probability, we often refer to experiments. An **experiment** (also known as a **trial**) is a procedure that can be infinitely repeated and has a well-defined **set of possible outcomes**, determined by chance, which is called the **sample space**.

For an **experiment to be binomial**, it must have the following properties:

1. The experiment consists of a fixed number of “Bernoulli trials”; i.e., trials that result in either a “success” or a “failure”.
2. The trials are identical and independent and therefore the probability of success remains the same from trial to trial.

RANDOM VARIABLE: A discrete random variable, denoted by a capital letter, like X or Y , is a real-valued function whose domain is the sample space of an experiment (and whose outcome is determined by chance).

EXAMPLE: The experiment is flipping a fair coin twice. The sample space will be:

$$S = \{(H, H), (H, T), (T, H), (T, T)\}$$

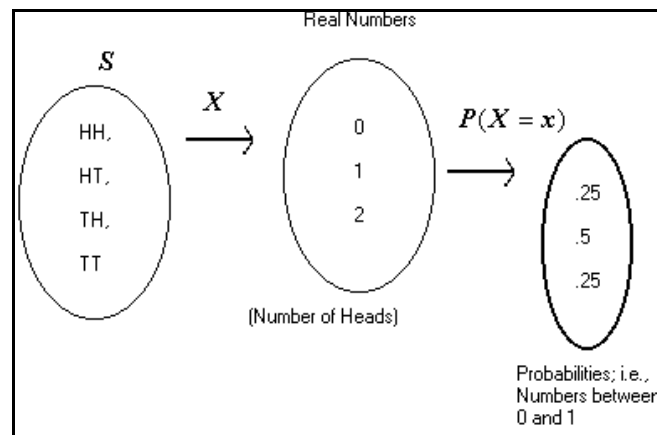
Suppose the random variable X denotes the number of heads obtained when flipping the coin twice. The possible real-valued “outputs” of X are $\{0, 1, 2\}$. The domain of X is

$$S = \{(H, H), (H, T), (T, H), (T, T)\}$$

PROBABILITY Density Function: For each event in the sample space S there exists a number between 0 and 1, denoted $P(x) = P(X = x) = f(x)$, where x is one of the values that X can take on. We say “the probability that X equals x ”. Also,

1. $P(x)$ is a real number between 0 and 1,
2. The probability of S is equal to 1, and
3. The probability of the union of n mutually exclusive events is equal to the sum of each of the probabilities of each event.

EXAMPLE: A diagram of how X takes elements from the coin-flipping sample space from above, into nonnegative integers, and how P takes those elements into real numbers between 0 and 1 is shown:



BINOMIAL RANDOM VARIABLE

Let X denote the number of successes in a binomial experiment. Then X is a binomial random variable. Since the experiment is binomial, then the probability of x “successes” out of n trials is given by:

$$P(x) = P(x \text{ successes out of } n \text{ trials}) = \binom{n}{x} p^x (1-p)^{n-x}$$

Where

- n denotes the fixed number of trials
- x denotes the specific number of successes in n trials
- $P(S) = p$ denotes the probability of a success in one of the trials
- $P(F) = 1 - p$ denotes the probability of a failure in one of the trials

Poisson

The Poisson distribution is a discrete probability distribution that applies to occurrences of discrete events over a continuous interval. The Poisson random variable X denotes the number of occurrences of the discrete event in a particular interval. The interval can be distance, time, area, volume, or some similar unit. Given a mean μ , the probability of the event occurring x times over a given interval is given by:

$$P(x) = \frac{(\mu)^x}{x!} e^{-\mu}$$

The Poisson random variables arise in connection with what are called Poisson processes. Poisson processes involve observing discrete events in a continuous “interval” of time, length, space, etc. For example, we might observe the number of white blood cells in a drop of blood. The number of white blood cells is the number of discrete events; the drop of blood is considered to be the continuous interval. Another example is the number of times radioactive gasses are emitted from a nuclear power plant during a year; the number of emissions is the number of discrete events and one year is the continuous interval.

In first semester Calculus (MATH 1A) it can be shown that $\lim_{n \rightarrow \infty} \left(1 + \frac{1}{n}\right)^n = e$, and we can extend this identity to show $\lim_{n \rightarrow \infty} \left(1 + \frac{b}{n}\right)^n = e^b$, where n & z are nonzero real numbers. We’ll use this last in the next part of the worksheet.

Part A:

Recall that

$$e^b = \sum_{k=0}^{\infty} \frac{b^k}{k!}$$

is the Maclaurin Series for e^b .

1. Show that, for the Poisson random variable, the sum of all of the probabilities is equal to one. Note: by “all of the probabilities,” assume $n \rightarrow \infty$.
2. Show that, for large n (as $n \rightarrow \infty$), that the Binomial and Poisson distributions are the same; i.e., show:

$$\lim_{n \rightarrow \infty} P(x) = \binom{n}{x} p^x (1-p)^{n-x} = \frac{(\mu)^x}{x!} e^{-\mu}$$

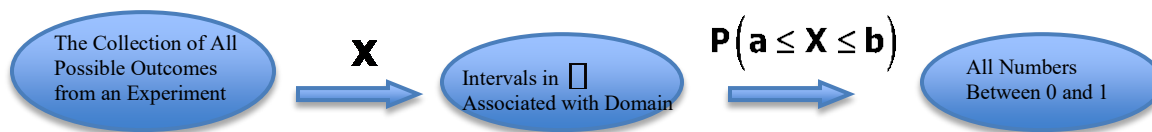
Hint: Use the fact proved in MATH 1A referenced above, and assume that $np = \mu > 0$.

Recall: $\binom{n}{i} = \frac{n!}{i!(n-i)!}$

[Click to go back to Appendices](#)

Continuous Random Variables

We will primarily be looking at *continuous random variables*; i.e., ones whose set of possible outcomes (domain) is uncountable (a random variable is a function, usually denoted by X or Y , whose outcome is determined by chance). Examples of continuous random variables include the weights, times, volumes, areas, etc.



Let X be a continuous random variable. Then there exists a non-negative *probability density function* $f(x)$ defined on $(-\infty, \infty)$ so that, for and interval $[a, b]$,

$$P(a \leq X \leq b) = \int_a^b f(x) dx$$

In other words, the probability that X is between a and b can be found by integrating the probability density function between a and b . Note that

$$P(-\infty \leq X \leq \infty) = \int_{-\infty}^{\infty} f(x) dx = 1$$

Also note that, with a continuous random variable X , the probability that X assumes any particular value is equal to zero because

$$P(a \leq X \leq a) = P(X = a) = \int_a^a f(x) dx = 0$$

The *cumulative distribution function* of X is defined to be

$$F(a) = P(X \leq a) = \int_{-\infty}^a f(x) dx$$

Notice that, by the FTC, if we differentiate $F(a)$ we get $f(a)$. In other words, the cumulative distribution function, evaluated at a , is equal to the integral of the density function up to a .

Now we consider three continuous random variables X , Y , & Z . The joint density function of X , Y , & Z is a function of f of three variables such that the probability that (X, Y, Z) lies in a region D is

$$P((X, Y, Z) \in D) = \iiint_D f(x, y, z) dA$$

Because probabilities aren't negative and are measure on a scale from 0 to 1, the joint density function has the following properties:

$$f(x, y, z) \geq 0 \quad \iiint_{\mathbb{R}^3} f(x, y, z) dA = \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} f(x, y, z) dA = 1$$

Now suppose X is a random variable with probability density function $f_1(x)$, Y is a random variable with probability density function $f_2(y)$, & Z is a random variable with probability density function $f_3(z)$. Then the X , Y , & Z are called independent random variables if their joint density function is the product of their individual density functions:

$$f(x, y, z) = f_1(x)f_2(y)f_3(z)$$

We can model the waiting times by using exponential density functions

$$f(t) = \begin{cases} 0 & \text{if } t < 0 \\ \mu^{-1}e^{-\frac{t}{\mu}} & \text{if } t \geq 0 \end{cases}$$

Where μ is the mean waiting time.

The expected value (aka, μ) of a continuous random variable X is similar to the expected value of a discrete random variable, except an integral (instead of a series) is used to compute the expected value:

$$E[X] = \mu = \int_{-\infty}^{\infty} x \cdot f(x) dx$$

Now if X , Y , & Z are random variables with joint density function f , we define the expected value of X , Y , & Z to be

$$\mu_1 = \iiint_{\mathbb{R}^3} x f(x, y, z) dA \quad \mu_2 = \iiint_{\mathbb{R}^3} y f(x, y, z) dA \quad \mu_3 = \iiint_{\mathbb{R}^3} z f(x, y, z) dA$$

Let's consider a situation with three independent waiting times.

At the Vintage Festival in Sonoma there are three “independent” wineries sampling their wine at different booths: Gamba, Rancho San Miguel, and Preston. Let x denote the amount of time it takes to get a glass of wine from Gamba, y denote the amount of time it takes to get a glass of wine from Rancho San Miguel, and z denote the amount of time it takes to get a glass of wine from Preston. On average, it takes 10 minutes from Gamba, 6 minutes from Rancho San Miguel, and 4 minutes from Preston. The density functions for x, y , & z are given as follows:

$$f_1(x) = \begin{cases} 0 & \text{if } x < 0 \\ Ae^{-\frac{x}{10}} & \text{if } x \geq 0 \end{cases}$$

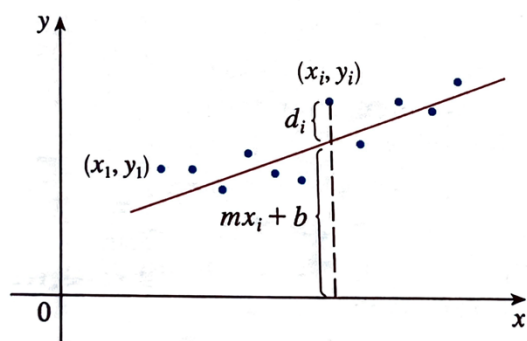
$$f_2(y) = \begin{cases} 0 & \text{if } y < 0 \\ Be^{-\frac{y}{6}} & \text{if } y \geq 0 \end{cases}$$

$$f_3(z) = \begin{cases} 0 & \text{if } z < 0 \\ Ce^{-\frac{z}{4}} & \text{if } z \geq 0 \end{cases}$$

1. What is the joint density function $f(x, y, z)$?
2. Use triple integrals to find ABC so that $f(x, y, z)$ is a probability density function?
3. Use triple integrals to find the probability that you wait a total of less than 11 minutes to get your glasses of wine.
4. Use triple integrals to find the expected value for x, y , and z . Is this what you expected?

[Click to go back to Appendices](#)

In statistics statisticians use the least squares regression line to model (or show a relationship between) bivariate data, where x and y are discrete variables, that are related linearly as $y = mx + b$, at least approximately, for some m and b . The statistician performs an experiment on a single subject and collects data in the form of ordered pairs $(x_1, y_1), (x_2, y_2), \dots, (x_n, y_n)$. Plotting these points creates a scatter diagram (see figure below from Calculus Early Transcendentals by Stewart 8/e text) and depicts a linear relationship between the two variables.



These points don't lie exactly on a straight line; however, we can find an equation of a line that describes the relation between the two variables. This line is the least squares regression line which minimizes the sum of the squared distances (residuals or errors) between the observed y_i - value and our predicted ($\hat{y}_i = mx_i + b$) value. We want to find the constants m and b so that the line $\hat{y}_i = mx_i + b$ fits the points as well as possible.

The method of Least Squares determines m & b as to minimize

$$\sum_{i=1}^n d_i^2$$

Where $d_i = y_i - (mx_i + b)$ (we'll use the second derivatives test). Since we are looking to find m & b our variables are m & b .

Thus let,

$$f(m, b) = \sum_{i=1}^n d_i^2 = \sum_{i=1}^n (y_i - (mx_i + b))^2$$

1. Find the partial derivative of $f(x)$ with respect to m and then find the partial derivative of $f(x)$ with respect to b .
2. Using the partial derivatives found in part (a) show that the critical points result in the following equations:

$$m \sum_{i=1}^n x_i + bn = \sum_{i=1}^n y_i$$

$$m \sum_{i=1}^n x_i^2 + b \sum_{i=1}^n x_i = \sum_{i=1}^n x_i y_i$$

3. The method of least squares determines m & b as to minimize

$$\sum_{i=1}^n d_i^2$$

the sum of the squares of these deviations. As we've been using the second derivatives test for multivariable functions, we continue to show a minimum occurs in the two unknowns m & b :

- a. Determine find $D(m, b)$.
- b. It can be shown that for any $n > 0$, $D_n(m, b) > 0$. For the purposes of this worksheet, it suffices to show that $D_2(m, b) > 0$. We illustrate with $n = 2$ because the that's the fewest number of points we need, in order to create a line.
- c. Deduce now, using the second derivatives test for multivariable functions, that we have indeed found a minimum for

$$\sum_{i=1}^n d_i^2$$

- d. Argue that this minimum is an absolute minimum.

4. Next solve the system of equations for m & b .

$$m \sum_{i=1}^n x_i + bn = \sum_{i=1}^n y_i$$

And

$$m \sum_{i=1}^n x_i^2 + b \sum_{i=1}^n x_i = \sum_{i=1}^n x_i y_i$$

[Click to go back to Appendices](#)

Probability density functions open the door for statisticians to calculate the probabilities. A function used to calculate probabilities of a continuous random variable is called a **probability density function** (pdf). A pdf must satisfy two properties:

1. The total area under the curve of the function over all possible values of the random variable must equal 1.
2. The height of the graph of the function must be greater than or equal to 0 for all possible values of the random variable.

(source: Statistics: Informed Decisions using Data by Michael Sullivan, III)

For several random variables, showing property (1) is simple. For the standard normal density function

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}}$$

verifying that the area under the curve is equal to one, is not so simple. To verify (1) with the standard normal, we, surprisingly, turn our attention to DOUBLE integrals. In particular, we define the improper integral (over the entire plane \mathbb{R}^2):

$$\begin{aligned} I &= \iint_{\mathbb{R}^2} e^{-(x^2+y^2)} dA \\ &= \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} dy dx \\ &= \lim_{a \rightarrow \infty} \iint_{D_a} e^{-(x^2+y^2)} dA \end{aligned}$$

where D_a is the disk with a radius a and center the origin. Note that the standard normal that we referred to above,

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}}$$

will reveal itself again in our work below.

PART A

1. Using double integrals in Polar coordinates show

$$\lim_{a \rightarrow \infty} \iint_{D_a} e^{-(x^2+y^2)} dA = \pi$$

where D_a is the disk with a radius a and center the origin.

Now, that we've shown problem (1) to be true it was given that

$$\int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} dy dx = \lim_{a \rightarrow \infty} \iint_{D_a} e^{-(x^2+y^2)} dA$$

& we proved in problem (1)

$$\lim_{a \rightarrow \infty} \iint_{D_a} e^{-(x^2+y^2)} dA = \pi$$

therefore, by transitivity we showed

$$\int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} dy dx = \pi$$

Part B:

To use what we've shown in Part A and to eventually show our area is one, we must verify the equalities:

$$\iint_{\mathbb{R}^2} e^{-(x^2+y^2)} dA = \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} dy dx = \lim_{a \rightarrow \infty} \iint_{D_a} e^{-(x^2+y^2)} dA$$

in particular, it's necessary to show that we can factor

$$\iint_{\mathbb{R}^2} e^{-(x^2+y^2)} dA$$

into a product of two integrals.

Recall from the "Factoring Theorem"

$$\iint_R g(x)h(y) dA = \int_a^b g(x) dx \int_c^d h(y) dy \quad \text{where } R = [a, b] \times [c, d]$$

which in the special case that $f(x, y)$ can be written a product of a function of only x , $g(x)$, and a function of only y , $h(y)$. Notice to use this theorem we also must be integrating over a rectangle.

We have:

$$\iint_{\mathbb{R}^2} e^{-(x^2+y^2)} dA = \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} dy dx$$

we can interpret the double integral on the right-hand side as a double integral over a square, S_a , with vertices $(\pm a, \pm a)$, and then take the limit as a goes to infinity:

$$\int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} dy dx = \lim_{a \rightarrow \infty} \iint_{S_a} e^{-(x^2+y^2)} dA$$

we then have,

$$\begin{aligned} \lim_{a \rightarrow \infty} \iint_{S_a} e^{-(x^2+y^2)} dA &= \lim_{a \rightarrow \infty} \int_{-a}^a \int_{-a}^a e^{-(x^2+y^2)} dx dy \\ &= \lim_{a \rightarrow \infty} \int_{-a}^a \int_{-a}^a e^{-x^2-y^2} dx dy \\ &= \lim_{a \rightarrow \infty} \int_{-a}^a \int_{-a}^a e^{-x^2} e^{-y^2} dx dy \\ &= \lim_{a \rightarrow \infty} \left[\left(\int_{-a}^a e^{-x^2} dx \right) \left(\int_{-a}^a e^{-y^2} dy \right) \right] \end{aligned}$$

using the factoring theorem.

We're integrating over a rectangle but notice the bounds are not finite. So then, how do we know the limit as $a \rightarrow \infty$ exists?

To answer this question, recall the product law for limits:

$$\lim_{x \rightarrow a} [f(x)g(x)] = \left[\lim_{x \rightarrow a} f(x) \right] \left[\lim_{x \rightarrow a} g(x) \right]$$

PROVIDED $\lim_{x \rightarrow a} f(x)$, and $\lim_{x \rightarrow a} g(x)$ exist.

Considering the product law with our question above, how do we know

$$\lim_{a \rightarrow \infty} \int_{-a}^a e^{-x^2} dx \quad \& \quad \lim_{a \rightarrow \infty} \int_{-a}^a e^{-y^2} dy$$

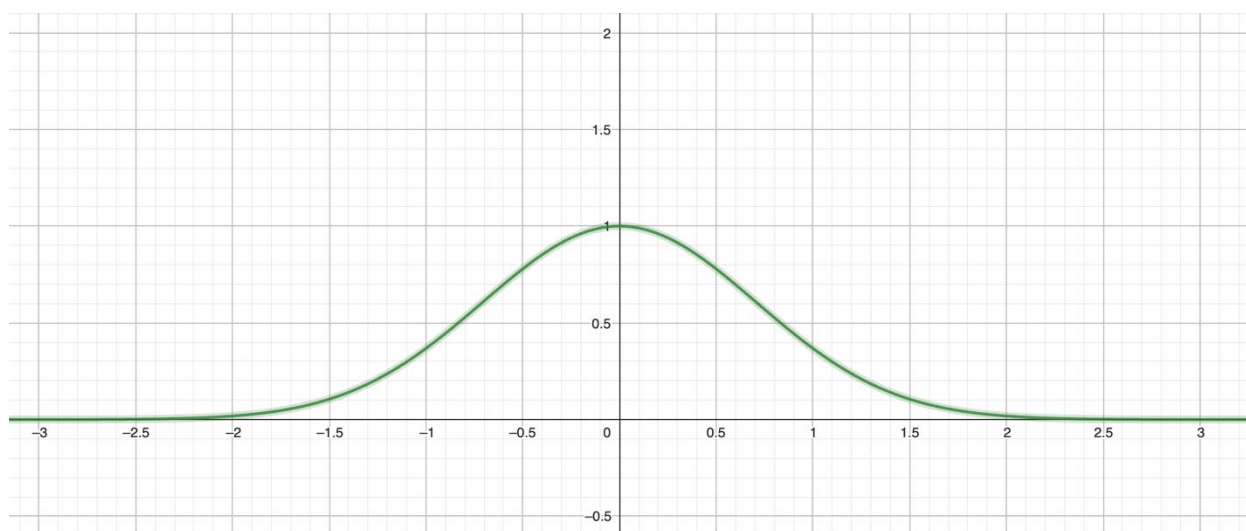
exist? We need to show that each of these limits exist before we can use the limit laws to apply the factoring theorem. Since

$$\lim_{a \rightarrow \infty} \int_{-a}^a e^{-x^2} dx \quad \& \quad \lim_{a \rightarrow \infty} \int_{-a}^a e^{-y^2} dy$$

are essentially the same integral with different variables we only need to prove the limit exists for one of the integrals, so, we want to show that

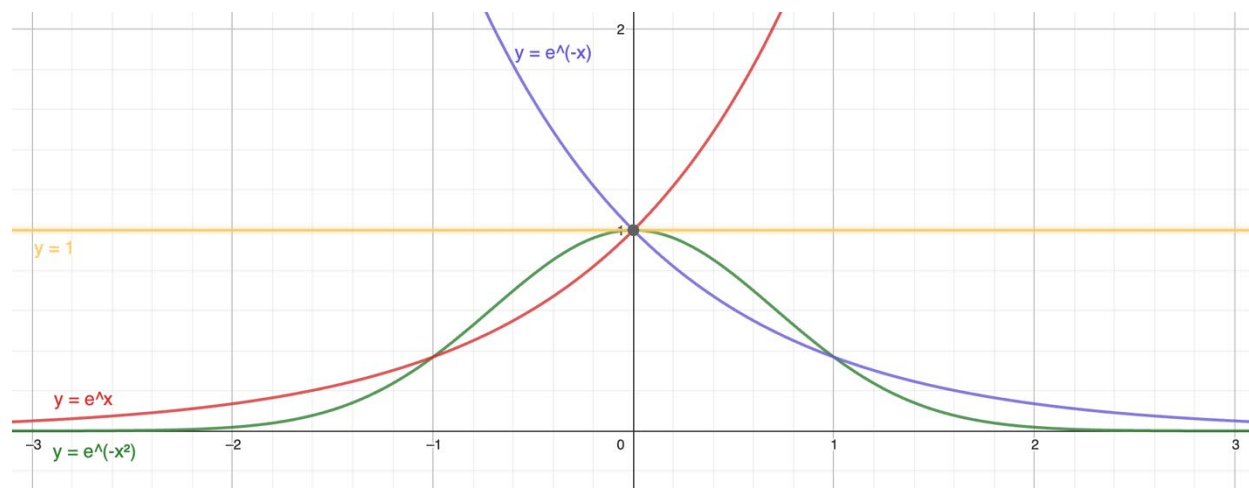
$$\lim_{a \rightarrow \infty} \int_{-a}^a e^{-x^2} dx$$

exists. In order to show the limit exists (that the improper integral must converge), which (graphically) means there's a specific, finite area between the (non-negative) curve and the x -axis. Using the comparison theorem, we'll show that our improper integral is convergent. Below is a graph of $y = e^{-x^2}$



Is there a graph perhaps that would bound the curve $y = e^{-x^2}$ from above?

If we look at the graph of $y = e^{-x}$, $y = e^x$, & $y = 1$ we see for a portion of the curve of $y = e^{-x^2}$ is bounded above by each graph of the three curves.



It looks like $y = e^{-x^2}$ is bounded by the following:

a. $0 < e^{-x^2} < e^x$ for $x \in (-\infty, -1)$

b. $0 < e^{-x^2} < 1$ for $x \in [-1, 1]$

c. $0 < e^{-x^2} < e^{-x}$ for $x \in (1, \infty)$

Now, a picture is not a proof, but it does give us guidance on what to do.

2. Show that $y = e^{-x^2}$ is bounded by $0 < e^{-x^2} < e^x$ on the interval $(-\infty, -1)$.

3. Show that $y = e^{-x^2}$ is bounded by $0 < e^{-x^2} < e^{-x}$ on the interval $(-1, \infty)$.

4. Now to show that $y = e^{-x^2}$ is bounded by $0 < e^{-x^2} < 1$ on the interval $[-1, 1]$ we need to break the interval apart to show that $y = e^{-x^2}$ is bounded.

a. Show $y = e^{-x^2}$ is bounded by $0 < e^{-x^2} < 1$ on the interval $[-1, 0)$.

b. Show $y = e^{-x^2}$ is bounded by $0 < e^{-x^2} < 1$ on the interval $(0, 1]$.

c. Based on what you showed in part a and b what can you conclude about $y = e^{-x^2}$ being bounded by $0 < e^{-x^2} < 1$ on the interval $[-1, 1]$?

From the previous three problems we've shown that $y = e^{-x^2}$ is bounded by:

$$0 < e^{-x^2} < e^x \text{ for } x \in (-\infty, -1)$$

$$0 < e^{-x^2} < 1 \text{ for } x \in [-1, 1]$$

$$0 < e^{-x^2} < e^{-x} \text{ for } x \in (1, \infty)$$

Now, why did we do all this work? Remember we have the integral

$$\lim_{a \rightarrow \infty} \int_{-a}^a e^{-x^2} dx$$

we need to show that the limit as $a \rightarrow \infty$ exists in order to use the limit laws to apply the factoring theorem on

$$\lim_{a \rightarrow \infty} \left[\left(\int_{-a}^a e^{-x^2} dx \right) \left(\int_{-a}^a e^{-y^2} dy \right) \right]$$

Again, since the integrals differ by a variable, we only need to show the limit as $a \rightarrow \infty$ exists for one of the integrals. So, we choose:

$$\lim_{a \rightarrow \infty} \int_{-a}^a e^{-x^2} dx$$

to show the limit as $a \rightarrow \infty$ exists we need to show the integral has a finite area between the (non-negative) curve and the x -axis.

In order to do so we need to write the integral as:

$$\int_{-\infty}^{\infty} e^{-x^2} dx = \int_{-\infty}^{-1} e^{-x^2} dx + \int_{-1}^1 e^{-x^2} dx + \int_1^{\infty} e^{-x^2} dx$$

5. For $x < -1$ we know $y = e^{-x^2}$ is bounded by $0 < e^{-x^2} < e^x$. Show that $y = e^{-x^2}$ has a finite area.
I.e. Using

$$\int_{-\infty}^{-1} 0 dx < \int_{-\infty}^{-1} e^{-x^2} dx < \int_{-\infty}^{-1} e^x dx$$

show

$$\int_{-\infty}^{-1} e^{-x^2} dx$$

is convergent using the comparison theorem

6. For $-1 < x < 1$ we know $y = e^{-x^2}$ is bounded by $0 < e^{-x^2} < 1$. Show that $y = e^{-x^2}$ has a finite area.
I.e. Using

$$\int_{-1}^1 0 dx < \int_{-1}^1 e^{-x^2} dx < \int_{-1}^1 1 dx$$

show

$$\int_{-1}^1 e^{-x^2} dx$$

is convergent using the comparison theorem.

7. For $x > 1$ we know $y = e^{-x^2}$ is bounded by $0 < e^{-x^2} < e^{-x}$. Show that $y = e^{-x^2}$ has a finite area.
I.e. Using

$$\int_1^{\infty} 0 dx < \int_1^{\infty} e^{-x^2} dx < \int_1^{\infty} e^{-x} dx$$

show

$$\int_1^{\infty} e^{-x^2} dx$$

is convergent using the comparison theorem.

Using what we found in the last three problems (5, 6, & 7) the sum of finite areas is a finite area, thus

$$\int_{-\infty}^{\infty} e^{-x^2} dx = \int_{-\infty}^{-1} e^{-x^2} dx + \int_{-1}^1 e^{-x^2} dx + \int_1^{\infty} e^{-x^2} dx$$

has a finite area and therefore,

$$\lim_{a \rightarrow \infty} \int_{-a}^a e^{-x^2} dx$$

limit as $a \rightarrow \infty$ exists and the integral

$$\int_{-\infty}^{\infty} e^{-x^2} dx$$

is convergent.

Now that we've proved the limit as $a \rightarrow \infty$ exists we can use limit laws to apply the factoring theorem:

$$\begin{aligned} \lim_{a \rightarrow \infty} \iint_{S_a} e^{-(x^2+y^2)} dA &= \lim_{a \rightarrow \infty} \left[\left(\int_{-a}^a e^{-x^2} dx \right) \left(\int_{-a}^a e^{-y^2} dy \right) \right] = \left[\lim_{a \rightarrow \infty} \int_{-a}^a e^{-x^2} dx \right] \left[\lim_{a \rightarrow \infty} \int_{-a}^a e^{-y^2} dy \right] \\ &= \left(\int_{-\infty}^{\infty} e^{-x^2} dx \right) \left(\int_{-\infty}^{\infty} e^{-y^2} dy \right) \end{aligned}$$

Recall, what we know so far:

$$A. \quad \iint_{\mathbb{R}^2} e^{-(x^2+y^2)} dA = \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} dy dx = \lim_{a \rightarrow \infty} \iint_{D_a} e^{-(x^2+y^2)} dA$$

$$B. \quad \iint_{\mathbb{R}^2} e^{-(x^2+y^2)} dA = \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} dy dx = \lim_{a \rightarrow \infty} \iint_{S_a} e^{-(x^2+y^2)} dA$$

$$C. \quad \lim_{a \rightarrow \infty} \iint_{S_a} e^{-(x^2+y^2)} dA = \left(\int_{-\infty}^{\infty} e^{-x^2} dx \right) \left(\int_{-\infty}^{\infty} e^{-y^2} dy \right)$$

$$D. \quad \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} e^{-(x^2+y^2)} dy dx = \lim_{a \rightarrow \infty} \iint_{D_a} e^{-(x^2+y^2)} dA = \pi$$

8. Using what we proven so far show that

$$\left(\int_{-\infty}^{\infty} e^{-x^2} dx \right) \left(\int_{-\infty}^{\infty} e^{-y^2} dy \right) = \pi$$

Part C:

9. Using what we've proven in Part A & B show that

$$\left(\int_{-\infty}^{\infty} e^{-x^2} dx \right) = \sqrt{\pi}$$

Part D:

10. Making a change of variable $t = \sqrt{2}x$, show that

$$\left(\int_{-\infty}^{\infty} e^{-x^2} dx \right) = \sqrt{2\pi}$$

Part E:

The process of solving the integral from Part D involved the integral

$$\left(\int_{-\infty}^{\infty} e^{-\frac{t^2}{2}} dt \right)$$

which then was shown to equal $\sqrt{2\pi}$. Replacing the variable t with x we have then

$$\left(\int_{-\infty}^{\infty} e^{-\frac{x^2}{2}} dt \right) = \sqrt{2\pi}$$

Now divide both sides by $\sqrt{2\pi}$:

$$\left(\frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\infty} e^{-\frac{x^2}{2}} dt \right) = 1$$

Which hopefully you recognize is the standard normal probability density function:

$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}}$$

thus we've verified the area under the standard normal probability density curve is one.

[Click to go back to Appendices](#)

Sabbatical Leave Report

A. Applicant

Name: Lauralyn Larsen

Department: Work Experience, Internships

Type of Leave: Project and Language Immersion classes

Leave Dates: Spring, 2024

B. Purpose of Leave

1) I Strengthened SRJC's Work Experience, Wine Studies, Viticulture and Enology departments/programs by establishing international internship opportunities for students in the famous wine-growing regions of Spain.

2) I am better prepared to serve the growing number of Spanish-speaking students at SRJC by my completion of a seven-week Spanish language immersion program in Spain and Mexico.

C. Objectives

1. I identified over 10 established wineries/companies with operations in Spain or another Country in either Europe or Central/South America.
2. I contacted the winery owners/managers to determine if they are open to international internships with a goal of culling the list down to three to six of the best prospects.
3. Met with the owners/managers in person, or via zoom, to discuss the parameters of the internships including student qualifications and job descriptions from the wineries.
4. Wrote up the descriptions of the three international internship opportunities including one Woofing organization, with details of student responsibilities and any prerequisites.
5. Attended seven weeks of Spanish immersion coursework to enhance my Spanish skills, thus allowing me to communicate more effectively with our bilingual students and to enhance my cross-cultural understanding.

D. Narrative

1. I identified over 10 established wineries/companies with operations in Spain or another Country in either Europe or Central/South America.

I began researching Spanish wineries by consulting SRJC instructors in Viticulture and Wine Studies, including Merilark Padgett Johnson, Kevin Sea, and Associate Instructor Brian Avila. They provided valuable insights, including contacts within the industry. One notable connection was with the editor of La Semana Vitivinicola, Spain's oldest Viticulture Association, through Professor Avila. The association agreed to publish an article I wrote, promoting internship opportunities (See Appendix A: La Semana Vitivinicola). The article was valuable publicity and helped in subsequent email and in-person outreach.

My second strategy involved directly emailing over 30 wineries, primarily in Spain's Rioja region. I wrote bilingual English-Spanish introductory emails, followed by reminders when necessary. I wrote the Newsletter article and a PowerPoint presentation in both languages to distribute (See Appendix B Bilingual PowerPoint Presentation). The wineries varied in size, from large operations to small family-owned businesses.

Finally, I visited wine tasting shops in the cities I toured across Spain. Over the course of three months and 16 cities, I engaged with local wine industry professionals. These interactions resulted in one formal agreement to offer an internship and enhanced my opportunities to practice Spanish and deepen my understanding of the culture.

2. Contact the winery owners/managers to determine if they are open to international internships with a goal of culling the list down to three to six of the best prospects.

From the 30+ emails sent, I received six responses and visited several of these wineries. I rented a car for 10 days to tour the Rioja region, covering the equivalent of two counties. Many wineries were closed during the off-season (winter), so in-person meetings were limited, but I maintained communication via email with one firm commitment from a winery in the Rioja region.

3. Meet with the owners/managers in person if possible, or via zoom, to discuss the parameters of the internships including student qualifications and job descriptions from the wineries.

Communication with my three final contacts occurred through email, Zoom, and one in-person meeting. We discussed expectations for SRJC interns, including the roles they would play at the wineries, supervision requirements, skill development, equipment training, safety protocols, and whether the positions would be paid or unpaid. I also explained how SRJC's Work Experience program offers academic credit, providing additional support for students. Each employer created a job description detailing the intern's responsibilities (See Appendix C: International Internship Employer Guide).

I also encouraged the wineries to provide accommodations, as many were in remote areas. Two agreed to offer on-site housing, while the tasting room internship in Granada offered plenty of housing options within walking distance.

4. Write up the descriptions of the three to six international internship opportunities with details of student responsibilities and any prerequisites.

Once the two wineries and one tasting room confirmed their participation, I assisted them in crafting detailed job descriptions. This was primarily done through email, focusing on outlining the student's responsibilities, application process, and next steps (See Appendix D: Job Descriptions).

Additionally, I had a SRJC Employer agreement form ready for signing (See Appendix G)

Additionally, I established a connection with WWOOFING ESPANA, a company that places international students in agricultural internships, primarily in Spain (See Appendix D).

5. Attend a Spanish immersion program to enhance my Spanish skills, thus allowing me to communicate more effectively with our bilingual students and to enhance my cross-cultural understanding.

I spent six weeks in Granada, Spain, living four blocks from my Spanish immersion school. During this time, I completed 50 hours of intensive group and individual instruction. The classes

were small (3-7 students), mostly attended by adults from the European Union. The program was academically challenging, with two-three hours of homework each day. As a beginner with some prior experience, the course was both demanding and invigorating (See Appendix E: La Escuela de Espanol DeLengua Completion Certificate).

The school also offered cultural activities in the evenings, which included visiting historical sites, dining out, and practicing Spanish in real-life settings. These social experiences made learning enjoyable and culturally immersive, while creating opportunity to form friendships with international peers.

I then completed an additional four weeks of Spanish immersion in San Miguel de Allende, Mexico. These classes were more informal, with 3-4 students, focusing on grammar and conversation. The program reinforced foundational language skills and improved my conversational Spanish (See Appendix F: Instituto Habla Hispana Certificate).

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

In the fields of Wine Studies, Viticulture, and Enology, developing international internships would significantly improve students' job prospects, making them more competitive in the workforce. These internships serve as a vital connection to the professional world, and establishing international contacts for students would broaden their opportunities for meaningful experiences beyond Sonoma and Napa Counties, enhancing their profiles in the U.S. and California wine industry upon their return.

Personally, living abroad in Spain and Mexico for six months allowed me to interact with local communities in a genuine and immersive way. Being a foreigner in a culture I only partially understood deepened my appreciation for the experiences of my students and colleagues from diverse backgrounds. I had such a rich experience learning the history and culture through many museum visits, cultural festivals, art courses, and casual conversations.

Upon returning from my sabbatical, I aimed to offer these opportunities to our bi-cultural, bilingual, or language-learning students. Unfortunately, due to legal constraints imposed by the SRJC legal department, this initiative will not be feasible. While I won't elaborate on these

limitations, it is disappointing that Viticulture/Wine Studies students will miss out on these international internship opportunities that could enhance their success.

Additionally, taking Spanish language courses and engaging in cultural experiences have enriched my ability to serve students. Although I am not yet bilingual, I now possess a deeper understanding of the cultures of many of my students, and I am highly motivated to continue my language studies with the goal of becoming bilingual.

2. How did this sabbatical leave benefit my department?

The introduction of international internships represents a new service for the Work Experience Department. I aim to collaborate with our SRJC legal department to explore the feasibility of supporting these international internships for the students' benefit.

The skills I acquired during six months of international travel will enhance our department's capacity to serve students from diverse linguistic and cultural backgrounds. Much of my work involves individual interactions, and my extensive experiences abroad have fostered a greater sense of compassion and understanding for all the students, colleagues, and professionals I support in my role.

3. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

The SRJC Strategic Plan states in goal three, Serving our Diverse Communities, the following objectives:

- ☐ Identify the educational needs of our changing demographic and develop appropriate and innovative programs and services with a focus on the increasing Latino/a population;
- ☐ meet the lifelong educational and career needs of our communities;
- ☐ provide relevant career and technical education that meets the needs of the region and sustains economic vitality.

My sabbatical effectively addressed all three objectives. My international living experience has enhanced my ability to engage with the Latinx community, particularly deepening my understanding of Mexican and Latinx culture. Many of the students I work with have Central American or South American backgrounds, and my newfound insights into Mexican culture

enrich my interactions and support for them. Although we currently lack credit-bearing international opportunities, students can still pursue international internships, travel, and study abroad programs thus enhancing their lifelong educational and career goals. I am now better equipped to discuss these options with students and guide them in exploring these opportunities. When students participate in these international opportunities, they will bring their enhanced skills and international experience back into the local economy.

F. Abstract for Board Report Summary

Lauralyn Larsen lived abroad in Mexico and Spain for six months and successfully completed a two-fold purpose during her sabbatical: 1) Strengthened SRJC's Work Experience, Wine Studies, Viticulture and Enology departments/programs by establishing international internships in the famous wine-growing regions of Spain. 2) Better served the growing number of Spanish-speaking students taking work experience courses at SRJC by completing a 7-week Spanish language immersion program, 3 weeks in Spain and 4 weeks in Mexico.

G. Appendices

Appendix A: La Semana Vitivinicola

Appendix B Bilingual PowerPoint Presentation (both versions)

Appendix C: International Internship Employer Guide).

Appendix D: Job Descriptions (3) & Woofing Description (1)

Appendix E: La Escuela de Espanol DeLengua Completion Certificate

Appendix F: Instituto Habla Hispana Certificate

Appendix G: SRJC Employer Agreement Form

Sabbatical Leave Report

A. Applicant

Name: Dr. Leslie R. Crane

Department: Health Sciences

Type of Leave: Independent study

Leave Dates: Fall, 2024

B. Purpose of Leave

The purpose of my sabbatical was to observe the simulation methods used to teach nursing theory and practice to nursing students to determine if these methods can be applied in the SRJC Simulation Laboratories. I visited 4 simulation laboratories in schools of nursing in the California Bay Area, 1 in Boise, Idaho, and 1 in Hamamatsu, Japan to observe new and different practices to be applied to the Simulation Laboratories (SimLabs) at the Santa Rosa Junior College (SRJC).

C. Objectives

1. I conducted a thorough literature review of best simulation practices to update current teaching/learning methods in the SRJC Sim Labs such as implicit bias, debriefing methods, and simulation escape rooms (see below).
2. I visited 4 Sim Labs in California Bay area (Alameda Health System, Dominican University, Samuel Merritt University, & University of San Francisco), Boise State University, & Seirei Christopher University in Hamamatsu, Japan to observe specific teaching/learning methods in other simulation laboratories that will enable nursing students to apply critical thinking concepts in providing safe patient care, use effective and appropriate verbal communication principles, take into consideration the psychological and cultural patient needs, and seek knowledge and strive towards self-development through active participation in debriefing.
3. I will share knowledge of the various simulation methods I learned with fellow members of the Bay Area Simulation Collective (BASC), particularly those from outside of California. The BASC meetings are usually scheduled quarterly. The next one is not yet scheduled, but when it is it will be at Santa Rosa Junior College (SRJC) and I will be giving the members a report on where I went on my Sabbatical leave and what I learned (see .

4. I shared knowledge of the various simulation methods with SRJC colleagues about how to implement recently observed ideas and strategies into the SRJC simulation curriculum with the nursing program faculty at the faculty meeting on 1/16/2025.
5. I was able to observe how other simulation labs use technology to supplement activities students are unable to perform in the clinical setting due to hospital policies that restrict student nurses performing certain aspects of patient.

D. Narrative

Objective #1 The most recent simulation journals were researched to find the most current concepts in simulation practice to guide potential changes in curriculum in the SRJC Sim Lab.

Abulebda K, Auerbach M, & Limaïem F. (2022). Debriefing techniques utilized in medical simulation. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK546660/>

Bailey K. (2021). Clinical simulation escape rooms: Puzzles and clue ideas. <https://www.healthysimulation.com/clinical-simulation-escape-rooms-puzzle-clue-ideas/>

National League for Nursing. (2023). End of life simulation. <https://www.montgomerycollege.edu/documents/academics/departments/nursing-tpss/nursing-simulation-scenario-library/end-of-life-care-simulation-guide.pdf>

Reinkemeyer E A, Chrisman M, & Patel S E. (2022). Escape rooms in nursing education: An integrative review of their use, outcomes, and barriers to implementation. Nurse Education Today, 119. (105571). <https://doi.org/10.1016/j.nedt.2022.105571>.

Ruhl C. (2023). Implicit bias (unconscious bias): Definition & examples. <https://www.simplypsychology.org/implicit-bias.html>

Shah H. S. & Bohlen J. (2023) Implicit Bias. National Center for Biotechnology Information. <https://www.ncbi.nlm.nih.gov/books/NBK589697/simulation> escape rooms

Objective #2 The different teaching/learning methods used at each of the Sim Labs visited were observed and, where indicated, will be introduced into the curriculum in the SRJC Sim Lab. Approximately 1 week was spent in both Boise, Idaho and Hamamatsu, Japan, although 2 two hours were spent in each Sim Lab in those cities..

- a. 8/29/2024 Kati Mackensie, Director. I combined a BASC meeting with a tour of the Alameda Health System (formerly Highland Hospital) Simulation Center. They have 3 simulation rooms, 2 control rooms and a debriefing room that splits into half. As a multidisciplinary center, they use a task trainer for medical students to perform lumbar punctures endotracheal tubes to intubate pediatric and adult patient. In addition to the usual SimLab equipment, they use a newborn warmer and pediatric crash cart.
- b. 9/3/2024 Barbara McCamish, Director
Dominican University is the venue where I first learned to conduct simulation with Professor McCamish as my replacement. The Home Health scenario took place in a patient's bedroom @ home for the Community Health course. The patient, a standardized patient rather than a simulation mannikin, was seen by a visiting nurse. A phone was connected into the sim room for the nurse to call the doctor and the pharmacy. During the debriefing th student were aske questions like “ What was your first impression when you walked into the room”? And what were their takeaways? The student's clinical instructor taught the students how to document using SOAP (Subjective-Objective-Assessment-Planning) format.
- c. 9/16/2024 Dr. Tracee Chapman, Director
Boise State University Simulation Center contains 6 simulation rooms, 3 debriefing rooms, & a large control room where 2 sim rooms can be controlled @ the same time. There is 1 Health Assessment room w/ stations. They have a faculty Rest Room w/ large plants, comfortable furniture & available music for use between classes. They've written progressive scenarios based on 1 patient w/ a new scenario somewhat in the future in the next semester with an End-of-Life or Palliative Care scenario during senior semester. They do an Escape Room simulation in the Mother/Baby course. During the debriefing they get out emotional responses, recap the scenario, consider what would be done differently, what did they learn. Nurses work w/ other disciplines in the SimLab. I spent a week in Boise but only 2 hours in the SimLab.
- d. 9/26/2024 Dr. Christina Rey, Director
Samuel Merritt University, on Zoom. 8 nursing students, 1 clinical instructor, 1 Sim educator, & 1 Sim Tech performing a simulation on Incivility written by Dr. Rey. The timeline was 10 minutes orientation & introductions, 15m engagement & discussion, 90m simulation and debriefing, 5m discussion of the post-activity. Discuss Zoom logistics: video, break-out rooms, participation. Clear expectations & objections, fiction contract to believe it's real, include respect & personal safety. Used a popcorn round to promote participation: after 1 student speaks, they select the next one to speak. Students create the guidelines for safe discussion. Example, in the role of bully there's to be no swearing, gender, ethnicity, or specific identity. Discussion of methods of self-care.

- e. 10/3/2024 Dr. Eiko Fujimoto, Professor and Dean, School of Nursing; Dr. Kimie Kubota, Professor; Yoshiko Miwa, Associate Professor; Fumiko Koide, Associate Professor; Nobuo Kimura, Associate Professor; Yukiko Sato, Interpreter
The Sierei Christopher University School of Nursing SimLab started in 2017 with an agreement with Samuel Merritt University (SMU) in Oakland to train the nursing faculty in simulation. The basic tenets the SMU shared were suspending belief, a desire to learn, a safe place to learn, the ideal length of scenarios, and how to debrief.

I reached the University via a 2-hour “bullet” train ride satisfying a bucket list wish I’d had since I’d read about bullet trains when I was a child. The nursing program graciously paid for the taxi to and from the train station and arranged for an interpreter for me. I was given a tour of the Skills and SimLabs and PowerPoint presentation simulations they use. The biggest difference I saw was that nurse midwives are trained in their BSN program. In this country to be a nurse midwife requires an MSN and extra coursework for certification.

After the presentation the faculty asked if I had time to stay and talk. We pulled the tables and chairs into a circle and were each given a bottle of green tea and a packaged sticky rice with bean curd. They asked about the JC and I told them how our ratings had improved from #116 to #16 nationally in one year and #6 in the state (2023- 2024). We compared Healthcare in Japan to the US (they won). I told them that health care expenses were the #1 cause for bankruptcy in the US.

- f. 10/16/2024 Dr. Janice Mark, Director of all 3 campuses (San Francisco, Orange County, & Sacramento)
University of San Francisco (USF) has a large SimLab in a separate building from the larger Skills Laboratory. It includes separate sections for pediatric/obstetrical, fundamentals, and medical/surgical simulations. These classes met in the SimLab 4 times/semester for a total of 110 students. 35 direct entry MSN (DEMSN) also use the SimLab per semester. The simulation scenarios include pediatric illnesses, birth, sepsis, stroke, hemorrhage and cancer,

Objective #3 BASC meets quarterly, previously on Zoom, and now hybrid face-to-face/Zoom with an open agenda. Each member reports from their individual Sim Lab, simulation conference participation, or simulation activities. I will share with the group what I have learned from my visits to other SimLabs during my Sabbatical Leave and what I will be adding to our own curriculum, including from their own Sim Labs. I will also be hosting a BASC meeting at our own SimLab in the near future having just received permission from our program director.

Objective # 4. I shared knowledge of the various simulation methods from the SimLabs I visited in person and on Zoom with SRJC colleagues at the first nursing program faculty meeting of the semester on 1/16/2025. With a five-minute time limit I shared with the faculty about which universities I visited and what strategies they used that I was recommending we implement in the

SRJC SimLabs. These included the Zoom scenario and opportunity to visit an Escape Room scenario next month at Samuel Merritt University, the Home Health setting at Dominican University, and the single-patient, multiple-semester progressive end-of-life and Escape Room scenarios at Boise State University. I spent the most time explaining the experience in Japan as it was the most unusual setting and included a cultural exchange of ideas in spite of the language barrier. The SRJC were the most impressed by the Japanese nursing professor's questions about the upcoming presidential election, US health coverage, and the contents of a Bachelor's in Nursing program in Japan.

Objective #5 Hospitals often don't allow nursing students to perform particular nursing skills such as using medication dispense machines or participating in cardiopulmonary resuscitation as possible liability issues. The SRJC nursing program has purchased simulation versions of the equipment involved that have been included in simulation scenarios to enable the students to be prepared to use this equipment upon graduation. What I saw at the other SimLabs was similar equipment such as Medication Dispense Units, Crash Carts (for cardiopulmonary arrests), defibrillators, infant warming tables, newborn incubators, cardiac monitors, and central line insertion kits or mechanical ventilators for SimLabs who conduct multidisciplinary scenarios.

E. Evaluation Summary

How did this sabbatical leave enhance my work performance at the college?

I am using the research I have already performed to enhance the depiction of implicit bias in the simulation scenarios and debriefing. I will use the research on simulation Escape Rooms to create our own scenario. I will use the research on End-of-Life or Palliative Care to write a four semester progressive scenarios about 1 patient. I will conduct further research as needed.

The visits to other Sim Labs, the research on current simulation practices, and feedback from BASC members have helped define additions in teaching/learning methods and innovations in the SRJC Sim Lab. The director of the BSU SimLab has promised to have her colleague to send me the instructions for the Escape Room simulation they have performed there. The director of the SMU SimLab will contact the instructor of the San Mateo SimLab who performs Escape Rooms to invite me to observe the one they will be conducting there next month. Grey Gardner, full-time faculty in our own nursing program, has conducted a simulation Escape Room and has agreed to collaborate with me to create one.

I have received permission from Dr, Katherine Magee, Nursing Program Director, to hold a BASC hybrid face-to-face/ZOOM meeting at SRJC in the near future.

How did this sabbatical leave benefit students in my discipline?

Best practices will benefit the students by giving them the best possible opportunities to learn. I met with the other SimLab instructors in the first Faculty Meeting of the semester to share with them what I learned and now have planned that they may participate.

How did this sabbatical leave benefit my department?

For example, all four semesters in the Nursing Program will benefit from collaboration in the progressive scenarios on the same patient culminating in an End-of-Life or Palliative Care scenario for the senior students. I have discussed this with Dr. Scott Meehl, the Seniors Course Manager, who agrees that this will be a beneficial teaching learning experience that will be supported in the curriculum by this section of the progressive scenarios. All of the faculty agree the simulation Escape Room will engage student interest. I have proposed using the symptoms, lab results, and treatment modalities of sepsis as possible clues to unlock the room.

How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

STRATEGY 1: ACADEMIC QUALITY – Support excellent teaching and maximize education learning outcomes

Stimulation is considered an excellent teaching/learning strategy that supports more standard methodology. Selected simulation scenarios are drawn from the lectures in each academic semester's lectures to pair with the learning the students are obtaining in the classroom, studying for exams, and caring for in the clinical setting that particular semester.

STRATEGY 2: STUDENT SUCCESS AND SUPPORT – Provide students with services, programs, and events in support of basic needs and educational goals in order to reduce student success equity gaps.

Simulation supports lecture, skills lab, testing, and clinical practice in teaching nursing students critical thinking and patient care. Nursing programs are rated in terms of percentage of students passing the national licensing exam (NCLEX) the first time they take it and how many students are retained until the end of the program. The SRJC Nursing Program is considered one of the top programs in the state with a consistent NCLEX rate of 95- 100% & high retention. Simulation is an integral part of the program.

F. Abstract for Board Report Summary

Dr. Leslie R. Crane conducted a literature review of current simulation journals. She spent her sabbatical semester learning more about teaching/learning methods in simulation laboratories in schools of nursing. She did this by visiting Sim Labs in 4 schools of nursing in the California Bay Area (Alameda Health Center, Dominican University, University of San Francisco, and Samuel Merritt University), Boise State University, and Seirei Christopher University in Hamamatsu, Japan observing their methods, asking questions, and networking for further contact. She learned several new strategies such as single patient scenarios across all four semesters, a simulation Escape Room, use of standardized patients, debriefing methods, and student engagement that she

will use and teach to the other simulation instructors. She also attended a Bay Area Simulation Collaborative (BASC) meeting during that period of time.

G. Appendices

1. Sim Lab 2025-2026 syllabus
2. BASC Sabbatical Presentation

Sabbatical Leave Report

A. Applicant

Name: Luz Navarrette

Department: English for Multilingual Students (formerly ESL, English as a Second Language)

Type of Leave: Independent Study

Leave Dates: Fall 2023-Spring 2024

B. Purpose of Leave

The purpose of this sabbatical leave was to explore the current academic landscape of California Community College programs serving multilingual English learners. I compiled information from California Community College EMLS/ESL Department websites, created and distributed a survey with respondents from over 35 colleges, conducted interviews with professionals, and reviewed recent literature regarding current trends in Community College EMLS/ESL instruction. The intent of this year-long independent study sabbatical was to gather, synthesize, and share findings with departmental colleagues at SRJC. An intended future outcome is for the EMLS Department to continue to stay abreast of research, policy, and best practices to best meet the ever-changing needs of our diverse multilingual students.

C. Objectives

1. Explore California Community College EMLS/ESL Department websites and arranged for interviews with ESL professionals to better understand different models of student placement academic support, and curricular programming.
2. Reviewed and summarized current academic and professional literature relevant to community college EMLS instruction and best practices.
3. Presented a summary and key findings to colleagues at SRJC.

D. Narrative

Objective 1: My original intent was to begin my sabbatical by exploring the websites of five neighboring California Community Colleges to better understand the placement, support, curriculum, and resources that community colleges offer their multilingual students. This “cross-pollination” was a guiding tenet of my sabbatical research. I quickly found vast differences between community college offerings and websites, so I took the time to explore every California Community College website in search of ESL program information. I created a database to capture general information about each college, including the contact information for

all EMLS/ESL Department Chairs (Appendix A). I used this database of contact information to disseminate a survey that was sent to all community college EMLS/ESL Department Chairs (Appendixes B and C). I then visited and/or interviewed representatives from five different colleges' EMLS/ESL Departments. Finally, I compiled the information into a presentation format (Appendix D). It is important to note that all information represents a particular snapshot in time.

Objective 2: Throughout my sabbatical, I reviewed literature relevant to the field of Teaching ESL, specifically focused on adult multilingual learners at the community college level. I curated a bibliography of relevant literature, websites, and resources (Appendix E). The bibliography includes over 45 sources and is organized into the following categories: Resources, Reports, Policy Information, Articles and Studies, Dissertations, and Blog Entries. The bibliography is not comprehensive, but it provides a snapshot of current research and literature. Most of the works are fewer than five years old, which was intentional to minimize outdated prepandemic (pre-2020) studies and findings. Select resources include a brief description, especially if the title does not clearly indicate the topic or content. Wherever possible, a direct link is included.

Objective 3: Upon completion of my sabbatical, I shared and led a discussion of my findings with colleagues. [PENDING - to be scheduled and presented in Spring 2025]

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

During my yearlong sabbatical, I was able to gather and organize information about several California Community College English for Multilingual Students (EMLS) programs. I had the opportunity to visit and engage in dialogue with professionals from other districts. I delved into current academic and professional literature related to Teaching English as a Second/Subsequent Language (TESOL). Most importantly, I had time to rejuvenate and release the chronic stress of the past several years. These components of my sabbatical all inform and improve my teaching, contributions to my department, and college service.

2. How did this sabbatical leave benefit students in my discipline?

Mostly, my students benefit from my rejuvenation and renewed energy. For example, my visit to Santa Monica College reminded me of the power of taking students on “field trips” to spaces on campus and to incorporate more outdoor activities when appropriate. Similarly, though not an official part of my sabbatical research, my Camino de Santiago experience of walking over 500 miles across Spain inspired “Caminos de la Vida” and “Life Journeys” themes in my classes. Beyond the impact on my particular students, all EMLS students have the potential to benefit from my sabbatical due to having instructors who are informed and reminded about current trends and practices in our field. One specific example that will benefit students beyond those in my classes was inspired by my visit to Allan Hancock College: laminating and posting EMLS-friendly Modern-Language Association (MLA) style reference sheets by all computer stations in the computer lab for students to refer to as needed.

3. How did this sabbatical leave benefit my department?

The SRJC EMLS Department is known to be at the forefront of innovative, student-centered offerings. We were among the first community colleges to have a UC transfer-level composition class approved. We are known for our robust noncredit program. Our faculty are active in the most important statewide professional organization in our field: CATESOL. My sabbatical research, including a statewide survey with 40 respondents, site visits, and interviews reaffirmed this. By sharing my findings with colleagues, they will be sure to continue student-centered practices.

Though passionate and dedicated professionals, many instructors do not have the time to read current TESOL literature or reports from the Chancellor's Office. In my review of the literature presentations to colleagues, I share, "I've read this, so you don't have to!" This is something I plan to continue.

Additional components of my sabbatical project which will benefit my department are 1) my renewed research skills and 2) database of contact information for all community college ESL programs in California.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

This sabbatical addresses all four initiatives of the [2023-2028 Strategic Plan: Goals and Objectives](#): 1) Academic Quality, 2) Student Success and Support, 3) Responsiveness to our Community, and 4) Campus Climate and Culture.

Initiative 1 Academic Quality	Initiative 2 Student Success and Support	Initiative 3 Responsiveness to our Community	Initiative 4 Campus Climate and Culture
Robust professional development and discipline expertise (Statewide Survey, College Visits, Interviews, Literature Review)	Create a sense of belonging and purpose for all students (Literature Review)	Supporting the diverse educational needs of our community (Literature Review)	Prioritize efforts in support of inclusion, diversity, equity, antiracism, and accessibility (Statewide Survey, College Visits, Interviews, Literature Review)

F. Abstract for Board Report Summary

During her sabbatical, Luz Navarrette explored the current academic landscape of California Community College programs serving multilingual English learners. She investigated programs at community colleges through a statewide survey of department chairs, informational interviews with professionals in the field, and site visits. Furthermore, she honed her research skills while reviewing relevant academic and professional literature. Dr. Luz Navarrette synthesized and shared highlights of her findings with departmental colleagues at SRJC, a process which affirmed and informed the department's priorities moving forward.

G. Appendices

- Appendix A: CCC ESL Department Contact Information Database
- Appendix B: Statewide Survey Instrument
- Appendix C: Statewide Survey Responses
- Appendix D: Presentation Slides
- Appendix E: Literature Review

Sabbatical Leave Report

A. Applicant

Name: Mas Iimura

Department: Chemistry and Physics

Type of Leave: Project

Leave Dates: Spring 2024 semester

B. Purpose of Leave

I accomplished the following during the successful sabbatical leave over the Spring 2024 semester. One of the objectives of this sabbatical leave was to improve CUREs for my future CHEM 12B (Organic Chemistry II) classes. To do so, I analyzed the results obtained from previous CHEM 12B CURE projects and developed a new CURE research topic for my future CHEM 12B sections. Additionally, I used the sabbatical leave to brainstorm and design meaningful demos to show the impact of the atmospheric greenhouse effect.

C. Objectives

During this sabbatical leave, the followings were successfully accomplished:

1. Analyzed the results obtained by students during the 2018 and 2019 CHEM 12B CUREs.
2. Explored new research directions to take future CHEM 12B CUREs.
3. Started designing a meaningful demo to help students and others visualize the impact of greenhouse effects.

D. Narrative

Project I. Analyze the results obtained by students during the 2018 and 2019 CHEM 12B CUREs.

Completing Project I was necessary before moving on to Project II. From informal student surveys, I knew that students who participated in the Spring 18 and Spring 19 CUREs found the experience highly beneficial. However, it was important for me to confirm that the students and I were able to accomplish significant scientific work over those two semesters. I completed this project by reviewing student lab notebooks and primary literature articles.

The 2018/2019 CURE aimed to develop a system for hydrogenating C=O functional groups under an ambient reaction condition. The goal was to use abundant, early transition metal complexes as catalysts to carry out this important transformation under either one atmospheric pressure of hydrogen gas or with some other cheap source of hydrogen.

We encountered many unexpected difficulties and obstacles during the two CUREs. For example, both key instruments – GC-MS and IR - failed during the Spring 2018 and Spring 2019 semesters. Despite the setbacks, we gained valuable insights that could be useful for future development in the field. We discovered that the order of addition of reagents plays an important role. For instance, when benzaldehyde was added to the mixture of Co(II) starting material and triphenylphosphine (PPh₃) before adding KO^tBu and 2-propanol, the reaction mixture turned to one color (blue). However, when benzaldehyde was added to the mixture of Co(II), triphenylphosphine, KO^tBu, and 2-propanol, it turned murky green. This is presumably due to some redox reaction taking place. Similarly, with Fe-complex, when benzaldehyde was added *before* introducing H₂ as the potential source of hydrogen, benzaldehyde was oxidized to carboxylic acid. However, when benzaldehyde was added *after* H₂ was introduced to the system, no oxidation of benzaldehyde was observed. Somehow, the addition of H₂ before introducing aldehyde prevents redox reaction from taking place. At this point, we do not know how the order of addition impacts when ketones are used, as ketones are more resistant to oxidation.

It may have helped if we had a better understanding of the identity of the metal complexes we were working with. However, as we did not have the means to isolate (these complexes are air-sensitive) and characterize these complexes, we did not spend much time studying them in detail. We made several attempts to grow crystals for X-ray crystallography studies to characterize Co-complexes. While one attempt yielded promising crystals, it resulted in immediate decomposition upon removing the mother liquor during our attempt to isolate the crystals.

We also explored the green synthesis of imines, specifically di-imines, using a microwave reactor. For most di-imine preparations, the green synthesis methods using microwave worked better than traditional methods. The two exceptions in which the microwave methods did not work well are where cyclization was possible and also where the initial product formed precipitated out of the reaction mixture. I feel that if we had explored this a bit more, this work could have been publishable, but unfortunately, we only have qualitative, not quantitative, data - none of the students reported percent yields. The one regret that I have about S18/S19 CURE is that I did not emphasize the importance of good lab notebook skills.

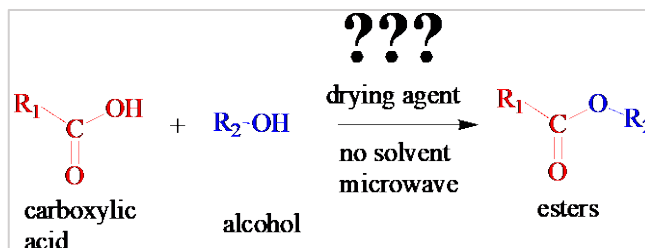
Project I is summarized in the attached PowerPoint slide.

Project 2. Explore new research directions to take future CHEM 12B CUREs

This project was the main focus of my sabbatical. After reflecting on my previous CURE experiences and reaffirming the importance of incorporating CUREs, I became even more motivated about including CURE in organic chemistry. The previous CURE focused on catalysis, and while students enjoyed the topic, I felt that it was a bit too aggressive, challenging, and somewhat Edisonian in the approach. For that reason, I decided that the next CURE should be more on traditional organic chemistry.

I began by reviewing the current literature articles on CUREs in chemistry, especially in organic chemistry. After selecting ester synthesis as the new topic, I spent a significant amount of time reading primary literature. I even had an opportunity to read a 1962 paper written in Japanese!

For the next Organic Chemistry II CURE, students will investigate the green synthesis of esters. Esters are an important class of compounds that play significant roles in our daily lives. Esters are responsible for many pleasant odors and flavors, and some esters are used as medicines. One well-known example is acetylsalicylic acid or aspirin.



The most common and well-known way of preparing esters is via Fischer esterification, which involves reacting a carboxylic acid and an alcohol. Fischer esterification is a classic organic chemistry reaction that all undergraduate organic chemistry students learn about. However, from a practical standpoint, it is not the most efficient method to prepare esters. Because this reaction is in equilibrium, it requires using an excess of one of the reagents and involves a series of work-up steps to isolate the ester product from the reaction mixture. Our goal for green esterification (synthesis of esters from carboxylic acids and alcohols) is to develop a reaction condition where:

- ☐ Equimolar amounts of the reactants (1:1 ratio of carboxylic acid – alcohol) are used, with near 100% conversion
- ☐ It involves minimal or no purification step
- ☐ The process is energy efficient
- ☐ There will be no excess waste being generated (i.e. use minimal amounts of reagents)

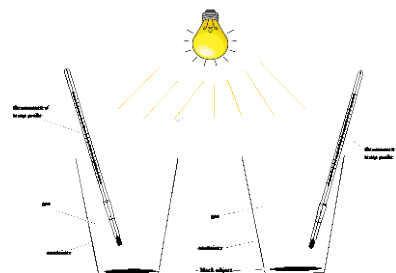
The idea behind green synthesis is to carry out a synthesis in a more environmentally friendly manner, promoting sustainability by efficiently using resources, producing less waste, and minimizing energy consumption. To accomplish this, we will attempt to remove water by using drying agents and carry out the reaction solvent-free in a microwave reactor. By introducing drying agents *directly* into the reaction mixture, the water produced can be removed, shifting the equilibrium to the right, favoring the formation of the ester product. The absence of solvent means that the only work-up needed at the end (in theory) is separating the ester product from the drying agent. This should be accomplishable if the microwave is used to heat the reaction mixture.

This project is summarized in the attached PowerPoint slide.

Project 3. Start designing a meaningful demo to help students and others visualize the impact of greenhouse effects.

Project 3 – designing a demo to show the impact of greenhouse effects - was my ‘fun’ project. I began working on this project when I hit a wall while working on Project #2. I spent the first several weeks reviewing current demos available for this subject.

Demos can be a powerful and valuable tool for introducing complex concepts and helping students and the public understand them. There are several demos available to show the greenhouse effect of carbon dioxides. These demos tend to have a similar design, as shown on the right: an open container (representing Earth) with a black object (light-absorbing material) is filled with gases. A lightbulb (representing the Sun) at the top is then turned on, and the temperature of the air inside the container is monitored. All of these demos show an increase in temperature when CO₂ is present in the container.



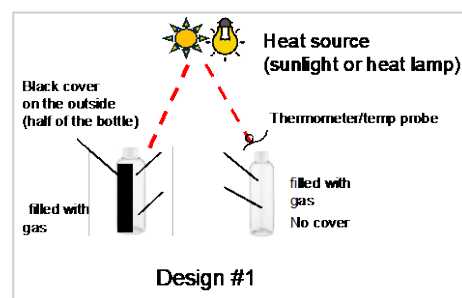
However, something about these demos did not sit right with me. After reading various articles, I realized that the results obtained from these demos are somewhat misleading. It has been shown that the observed temperature increase in these demos is due to CO₂ being heavier (more dense) than air. The greenhouse effect on Earth’s temperature is due to the radiative heat transfer nature of greenhouse gases such as CO₂. However, the observed increase in temperature in these demos is due to convective heat transfer. Because CO₂ is heavier than air, there isn’t good mixing, and as a result, the more dense gases trap the added energy. These demos may be biased – they show the right results but for the wrong reason. As a scientist, I worry about demos like that.

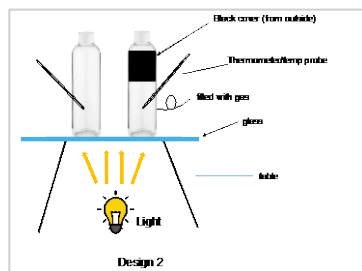
Some considerations for designing more meaningful demos that clearly demonstrate the warming effects of CO₂ include:

- ☐ Ease of setup
- ☐ Measure/observe the impact of cooling (decrease in temperature) in the presence of CO₂ (as well as increase in temp)
- ☐ Be careful about the modes of the heat transfer.

Based on what I learned from the literature research, I developed the following two designs.

Design #1 is similar to the other currently available demos, but instead of heating from directly above, the sunlight (or heat lamp) would enter from the side. There will be a black cover on the outside of the container. For control, there will be an identical setup without a black cover. The temperature within the sealed container (which contains different gases) will be measured at various locations of the container, and we will be monitoring both the increase and decrease of temperature. Because the light would be entering from the side, we would not need to worry about the convective heat transfer.





In Design #2, the light will be introduced from the bottom. As shown in the image, one of the containers would have a black cover on the top (from the outside), and the other bottle will have no cover (control). Again, temperature will be measured at various locations (for both increase and decrease). Since the dense gases would be at the bottom of the containers, this setup should minimize the convective heat transfer pathway, especially toward the top of the container.

This project is summarized in the attached PowerPoint. I plan to test these demos during the upcoming academic years and make the necessary adjustments.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

This sabbatical leave allowed me to reflect on the science behind the previous CURE project (Project #1) and explore new directions for the CURE in my future CHEM 12B class (Project #2). It provided time to step back and evaluate what is important for students while rejuvenating me as a chemist and an educator. While running CUREs is both time- and energy-consuming, I feel ready to introduce the CURE into my CHEM 12B class in the near future.

2. How did this sabbatical leave benefit students in my discipline?

Course-based undergraduate research experiences (CUREs) are a powerful tool for students interested in STEM discipline, and my CHEM 12B students would benefit greatly from this capstone experience.

Since everyone in the class will be doing research, CUREs will provide an inclusive entry point for many of our students to scientific research. My students will be introduced to real-world lab approaches and problem-solving skills working on a genuine research question in a familiar and supportive learning environment. At the same time, they will have the opportunity to connect classroom knowledge to real-life problems. The new CURE topic I developed (Project #2) is well-suited for the CHEM12B students. Through the CURE experience, I aim to improve their confidence and sense of belonging in the STEM field. I also want the students to understand and appreciate the importance and power of failure in scientific research (and in life).

3. How did this sabbatical leave benefit my department?

While the traditional labs, where the outcomes are known to both the instructors and students, are beneficial in introducing important laboratory skills and concepts to students, many instructors recognize the shortcomings of these cookbook-style labs.

CUREs are a powerful tool in undergraduate STEM education, offering significant benefits for both students and the department. Research has shown that undergraduate research experiences

benefit women and underrepresented minority students. Beyond providing exposure to research, CUREs will help students develop their problem-solving skills, and the experience can improve their confidence and sense of belonging in the STEM discipline. Also, it has been reported that CUREs can improve the retention of students in the STEM field.

In the future, I plan to share my CURE experience with my colleagues in the department and across the discipline, hoping to introduce and encourage others to consider incorporating CURE into their classes. Also, given that there are not that many CUREs in the field of organic chemistry at California community colleges, my dream is to eventually publish the impact of an Organic Chemistry CURE when the time is right. To do so, I will need to develop a set of meaningful and informative pre- and post-CURE surveys.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

The three projects align exceptionally well with the SRJC strategic plan and my department's educational mission. For example, in addition to fostering and honing their critical thinking and problem-solving abilities, incorporating CURE into my organic chemistry (Projects I and II) will allow **all** my students to participate in research, encouraging the sense of belonging for all students and promoting inclusivity.

F. Abstract for Board Report Summary

During his successful sabbatical leave during the Spring 2024 semester, Masanori Iimura worked on three projects. He analyzed the results from the Spring 18 and Spring 19 CUREs and developed a new research topic for CURE to implement in his future CHEM 12B class. Additionally, he designed two demo setups to showcase the impact of greenhouse gases to students and the public.

G. Appendices

- ☐ PowerPoint summarizing Project I
- ☐ PowerPoint summarizing Project II
- ☐ PowerPoint summarizing Project III
- ☐ PowerPoint – What is CURE?
- ☐ PowerPoint – Green Chemistry
- ☐ Bibliography

Sabbatical Leave Report

A. Applicant

Name: Dr. Michael Hale, Ph.D.

Department: English

Type of Leave: Book Project

Leave Dates: Spring 2024

B. Purpose of Leave

During my sabbatical leave, I revised my 2015 dissertation, wrote a book proposal, and sent it to several academic publishers with the hope of negotiating a publishing contract. The title of my dissertation is “New Deal to New Majority: SDS's Failure to Realign the Largest Political Coalition in the 20th Century,” and it seeks to investigate a long-term puzzle for scholars, journalists, and progressive minded people: few constituencies have proven more difficult to understand than working class people who call themselves white in the United States. Even recently, in the search to understand Donald Trump’s election, an unprecedented amount of reporting and scholarship has been focused on the mobilization of “white” working class voters. In a country that actively discourages ever mentioning class at all and discourages discussion of race as well, this is remarkable. In fact, the day after the 2016 election, the *New York Times* ran an opinion piece declaring “Why Trump Won: Working-Class Whites.” Even before the recent election, many commentators and scholars were consumed with a puzzling question: working class people who think of themselves as white once voted for Democrats as a solid constituency of the New Deal coalition, but now significant percentages of that same constituency vote for Republicans or don’t vote at all. For the last 50 years, the general question of how the New Deal coalition broke apart and the more specific question of the realignment of significant percentages of this sizeable constituency of voters periodically resurfaces, but never with more urgency than now. *New Deal to the New Majority* seeks to identify the 1950s and 60s as ground zero for the break apart of the New Deal coalition. This stands in opposition to many scholars who focus solely on 1980s and the emergence of the Regan New Right coalition. These scholars are missing an important pre-history to the Regan Revolution. Rather than focus on the 70s and 80s, it is important to focus on and intellectual, cultural history of social movements in the 1950s and 60s.

C. Objectives

1. Re-read my entire dissertation from the lens of my new thinking since graduating in 2015.	Completed
2. Conducted a literature review of recent scholarship.	Completed

3. Revised the last chapter to reflect current scholarship.	Completed
4. Revised the conclusion to reflect the new realities and scholarship after the Trump election of 2016	Completed
5. Revised my dissertation with an eye towards what scholars call “de-dissertationizing” it. In other words, transitioning my dissertation into an academic book.	Completed
6. Wrote a book proposal and sent it to several academic publishers.	Completed

D. Narrative

<p>1. Re-read my entire dissertation from the lens of my new thinking since graduating in 2015.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Finished by January <input type="checkbox"/> I changed the title: <i>From the New Majority to MAGA: Consequences of SDS's Abandonment of the Working Class</i>
<p>2. Conducted a literature review of recent scholarship</p> <ul style="list-style-type: none"> <input type="checkbox"/> See G. Appendices for the Selected Annotated Bibliography <input type="checkbox"/> I attended a conference at Berkeley in December: “Antonio Gramsci and the Current Conjuncture Conference” (See G. Appendices). This conference aided me in understanding the range of current scholarship. I connected with the director of Rightwing Studies at Berkeley and with Geographer Gillian Hart, an expert in rightwing populist. <input type="checkbox"/> Lastly, I attended Haymarket Books Socialism conference in September. I connected with Ruth Wilson Gilmore and Bill Mullen, both leading American Studies scholars. (See G. Appendices)
<p>3. Revised the last chapter to reflect current scholarship</p> <ul style="list-style-type: none"> <input type="checkbox"/> Instead of revising my last chapter, I wrote three new chapters to reflect my evolving thinking on the subject. <input type="checkbox"/> See G. Appendices for a description of the revisions and additions I made along with the current table of contents with the revised and new chapters highlighted.
<p>4. Revised the conclusion to reflect the new realities and scholarship after the Trump election of 2016</p> <ul style="list-style-type: none"> <input type="checkbox"/> This became my last chapter instead of the conclusion <input type="checkbox"/> See G. Appendices for a description of the revisions and additions I made along with the current table of contents with the revised and new chapters highlighted.

<p>5. Revised my dissertation with an eye towards what scholars call “de-dissertationizing” it. In other words, transitioning my dissertation into an academic book.</p> <ul style="list-style-type: none"> <input type="checkbox"/> This was an iterative process throughout the sabbatical. I reconnected with the chair of my dissertation committee as well as my outside reader to aid me. They both serve on various editorial boards of academic presses.
<p>6. Wrote a book proposal and sent it to several academic publishers.</p> <ul style="list-style-type: none"> <input type="checkbox"/> See G. Appendices for email responses from the publishers acknowledging receipt of my submissions along with a copy of the book proposal.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college? *The expected outcome is the impact on your teaching of the courses.*
 - ☐ In Fall 2024, after attending the Democratic National Convention, I published several articles in *Counter Punch* and *Jacobin*. I provided these articles to several colleagues.
 - ☐ In Fall of 2024, I gave several talks at SRJC and in the community over the next several months. Fall 2024 semester I spoke twice in the Intercultural Center’s “Dismantling False Narratives” series (See Appendices), and I also spoke in 4 classes of colleagues.
 - ☐ In Spring of 2024, Robert Ethington has enlisted me for his Democracy in Action series to give a three-part series on understanding populism. Corina has enlisted me to speak at SGA on the same topic.
 - ☐ Using materials from my annotated bibliography (See G. Appendices), I reoriented my curriculum for English 5 to focus on the importance of journalism and critical information literacy in a democratic society. Assigning Coates *The Message* has been a rewarding experience in light of the current election and world situation.
2. How did this sabbatical leave benefit students in my discipline? *The expected outcome is the impact you might make on the students within your discipline.*
 - ☐ I teach composition. The biggest benefit to my students that will come from my book project is an even deeper humility about how hard and humbling the writing process can be. This will greatly enhance my empathy for my students who struggle with writing.
 - ☐ Students are deeply confused about our current political environment. My enhanced curriculum that tries to explain rise of MAGA through the lens of the history of rightwing populism in the US has helped students develop deeper understanding but also models a form of engaged scholarship.
 - ☐ I plan to continue to redesign my curriculum along these lines as I prepare to teach English 1A in the Fall 2025.
3. How did this sabbatical leave benefit my department? *The expected outcome is the impact you might make on the students and colleagues within your department/cluster.*

- ☐ Several department colleagues attend my public talks and request classroom presentations.
- ☐ In November of 2024, I gave a 20-minute book talk on the subject of my sabbatical. In my 11 years at SRJC, I am the only one who has ever done this in the English department.

4. How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?

My dissertation project studies the way in which certain members of the New Deal coalition, namely working-class people, felt neglected by New Left institutions like Students for a Democratic Society as it shifted its focus from workers to students and the Democratic Party as it shifted its strategy from working and poor people to various aspects of the neoliberal economy, namely technology, finance, and real estate, so called knowledge workers. These neglected constituents increasingly find themselves at community college needed to transition from older jobs in the industrial economy to jobs in the post-industrial economy. Our strategic plan along with the educational plan acknowledges the importance of welcoming all students with a focused attention on the most disproportionately impacted students.

F. Abstract for Board Report Summary

Dr. Michael Hale, PhD worked on expanding and converting his 2015 dissertation, "New Deal to New Majority: SDS's Failure to Realign the Largest Political Coalition in the 20th Century," into an academic book. In addition, he wrote a book proposal and submitted it to several publishers. He did this by attending several international conferences, attending the 2024 DNC as a reporter, reading scholarship published after 2015, building relationships with scholar/activists prominent in the study of populism, and drafting three additional chapters that focused on rightwing populism and Trump's 2016 election. His new book will hopefully be published in 2025: *From the New Majority to MAGA: Consequences of SDS's Abandonment of the Working Class*. He submitted his proposal to twelve different publishers.

G. Appendices

- A. Selected Annotated Bibliography from my Literature Review
- B. Email Receipt of Gramsci Conference
- C. Email Receipt of Haymarket Conference
- D. Dismantling False Narratives advertisement
- E. Outline of Book Chapters
- F. Narrative of Revisions and Additions

G. Selection of Book Proposal Submissions and My Book Proposal

SELECTED ANNOTATED BIBLIOGRAPHY FROM MY LITERATURE REVIEW

Coates, T.-N. (2024). *The Message. One World*

This book by Ta-Nehisi Coates consists of three essays exploring how narratives shape realities and distort truths. Coates examines global and historical conflicts through his travels to Senegal, South Carolina, and Palestine, addressing themes like race, nationalism, and mythmaking. The book emphasizes the importance of confronting destructive myths to embrace liberating truths

Davis, A. Y. (2005). *Abolition Democracy: Beyond Empire, Prisons, and Torture*. Seven Stories Press.

This book presents a series of interviews with Angela Davis, a prominent political figure and activist. She explores the relationship between democracy and the prison-industrial complex, advocating for a form of "abolition democracy" that seeks to eliminate the conditions giving rise to prisons rather than merely reforming them.

Glaude Jr., E. S. (2016). *Democracy in Black: How Race Still Enslaves the American Soul*. Crown.

Glaude examines the persistent racial injustices undermining American democracy. He argues that deeply embedded biases and systemic inequalities continue to perpetuate a racial hierarchy in the U.S. The book critiques black leadership, discusses the impact of neoliberal policies on black communities, and calls for a radical restructuring of social, political, and economic systems to ensure genuine equality.

Green, J. (2017). *Devil's Bargain: Steve Bannon, Donald Trump, and the Storming of the Presidency*. Penguin Press.

Green's book provides an in-depth look at the partnership between Donald Trump and Steve Bannon during the 2016 U.S. presidential election. It details Bannon's role in Trump's campaign, the rise of the alt-right movement, and the strategies employed to secure Trump's victory.

Hart, G. (2021). *Decoding 'the base': white evangelicals or Christian nationalists?* Studies in Political Economy, 102(1), 61-76.

This article examines the nature of Donald Trump's political base, challenging the common characterization of it as primarily "white evangelicals." Hart argues that a more accurate framing is "Christian nationalism," which encompasses a broader coalition beyond just evangelical Christians.

Hart, G. (2020). "Resurgent nationalisms & populist politics in the neoliberal age." *Geografiska Annaler: Series B, Human Geography*, 102(3), 233-238.

In this introduction to a special issue, Hart provides an overview of the interconnections between resurgent nationalisms, populist politics, and neoliberalism in the contemporary global context. She frames the contributions to the special issue, which emerged from a symposium on these themes, within a broader analytical approach that seeks to understand these phenomena as interrelated global processes rather than isolated national developments.

Hart, G. (2020). "Why did it take so long? Trump-Bannonism in a global conjunctural frame." *Geografiska Annaler: Series B, Human Geography*, 102(3), 239-264.

This article presents an extended analysis of the rise of Trump and Bannonism in the United States, situating it within a global comparative framework that includes South Africa and India. Hart employs a method of "relational comparison" combined with Gramscian conjunctural analysis to examine why it took so long for a figure like Trump to ascend to power in the U.S., given the country's history of racism and right-wing Christian nationalism. The article explores the interconnections between neoliberal capitalism, exclusionary nationalisms, and right-wing populist politics across these different national contexts

Klein, Naomi (2023). *Doppelganger: A Trip into the Mirror World*. Farrar, Straus and Giroux.

Klein's political analysis focuses on her study of Steven Bannon's podcast War Room. She develops a number of insights on the alt-right as well as MAGA populism.

Kuhn, David Paul (2020). *The Hardhat Riot: Nixon, New York City, and the Dawn of the White Working-Class Revolution*. Oxford University Press.

This book provides a detailed account of the Hardhat Riot that occurred on May 8, 1970, in New York City. Kuhn examines the clash between construction workers and anti-war protesters, situating it within the broader context of American politics and the cultural divisions of the Vietnam era. The author argues that this event marked a turning point in the relationship between the white working class and the Democratic Party, ultimately contributing to the rise of Nixon's "Silent Majority" strategy.

Lichtenstein, Nelson, and Judith Stein (2023). *A Fabulous Failure: The Clinton Presidency and the Transformation of American Capitalism*. Princeton University Press.

This book examines Bill Clinton's presidency and its impact on American capitalism. The authors argue that Clinton's administration, despite initial progressive intentions, ultimately embraced neoliberal policies that exacerbated inequalities.

Newman, Lainey, and Theda Skocpol (2024). *Rust Belt Union Blues: Why Working-Class Voters Are Turning Away from the Democratic Party*. Columbia University Press.

This book examines the relationship between the decline of labor unions and the shift of working-class voters away from the Democratic Party. Using western Pennsylvania as a case study, the authors argue that union members' loyalty to Democrats was rooted in the group identity fostered by unions rather than just economic policies. As union influence waned, conservative institutions filled the social void, contributing to changing political allegiances.

Peck, R. (2019). *Fox Populism: Branding Conservatism as Working Class*. Cambridge University Press.

This book offers a fresh perspective on the success and political influence of Fox News Channel. Peck argues that Fox's appeal stems not just from its conservative editorial stance, but from its distinctive stylistic approach that fuses populist politics with tabloid journalism. The author traces how Fox developed its counter-elite brand and deploys style as a political tool to frame news events.

Roediger, D. R. (2020). *The Sinking Middle Class: A Political History*. OR Books.

Roediger's work examines economic trends, policy decisions, and social changes that have impacted the middle-class in America. He also provides a political and intellectual history of several Clinton-era consultants that helped usher in the pivot towards focusing on the middle class and away from the working class.

Rosenthal, L. (2020). *Empire of Resentment: Populism's Toxic Embrace of Nationalism*. The New Press.

This book examines the transformation of right-wing populism and its embrace of xenophobic nationalism. Rosenthal argues that the resentment towards perceived cultural elites is the driving force behind this movement, which has gained power in at least a dozen countries.

Ruffini, Patrick (2023). *Party of the People: Inside the Multiracial Populist Coalition Remaking the GOP*. Simon & Schuster.

This book by Republican pollster Patrick Ruffini examines the shifting demographics and political trends within the Republican Party. Ruffini argues that the GOP is forming a diverse, working-class coalition that transcends racial lines.

Sides, John, et al (2018). *Identity Crisis: The 2016 Presidential Campaign and the Battle for the Meaning of America*. Princeton University Press.

This in-depth analysis of the 2016 U.S. presidential election examines how fundamental characteristics of American politics combined with the candidates' rhetoric to produce an unexpected outcome. The authors argue that Trump's victory was foreshadowed by changes in party coalitions driven by racial and ethnic identities, which were further exacerbated by campaign focus on race, immigration, and religion.

Táíwò, Olúfẹ̀mí O (2022). *Elite Capture: How the Powerful Took Over Identity Politics (and Everything Else)*. Haymarket Books.

Táíwò explores how the concept of identity politics, originally introduced by the Combahee River Collective, has been co-opted by elites for their own interests. The author argues for rejecting elitist identity

politics in favor of a constructive politics of radical solidarity, aiming to organize across differences for social change.

EMAIL RECEIPT OF GRAMSCI CONFERENCE

Hale, Michael

From: calendar@berkeley.edu
Sent: Friday, December 1, 2023 9:42 AM
To: Hale, Michael
Subject: UC Berkeley notification: Reminder: Antonio Gramsci and the Current Conjuncture on December 2, 2023

EXTERNAL

UC BERKELEY

UC Berkeley notification: Reminder: Antonio Gramsci and the Current Conjuncture on December 2, 2023

This is a message from UC Berkeley.

This is a reminder that you are registered for [Antonio Gramsci and the Current Conjuncture](#), December 2, 2023 at 9:30am.

Please let us know if you can no longer attend so we can invite folks on the waitlist.

EMAIL RECEIPT OF HAYMARKET CONFERENCE



Michael Hale <halemichael61@gmail.com>

Your tickets for: Socialism 2024

1 message

Haymarket Books <haymarketbooks@buytickets.at>
Reply-To: Haymarket Books <events@haymarketbooks.org>
To: halemichael61@gmail.com

Tue, Jul 9, 2024 at 8:45 PM

Thanks for registering for Socialism 2024!

Please check out the full Socialism 2024 website for updated details on speakers, schedule, logistics and other information: www.socialismconference.org.

Please note: All attendees of Socialism 2024 must wear masks indoors at the conference. Read more about our public health and COVID-19 precautions at www.socialismconference.org.

If you have any questions, please email us at info@socialismconference.org.

DISMANTLING FALSE NARRATIVES ADVERTISEMENT



5 Myths about Immigrants that Help Fuel Our Toxic Bipartisan Political Culture

Wednesday, Oct 9 | 10:00 -11:30 pm

Santa Rosa Intercultural Center, Pioneer 380

Come learn how to debunk 5 common myths about immigrants that circulate among Democrats and Republicans in our current political moment. Led by Dr. Michael Hale.



Is Voting an Effective Tool of Social Change?

Wednesday, Oct 30 | 10:00 -11:30 am

Santa Rosa Intercultural Center, Pioneer 380

Between people arguing that "voting in America does not matter" and others saying, "vote as though your life and your democracy depends on it," students are receiving dramatically opposing messages. For a person who wants their voice heard, this workshop will investigate the question of whether voting is an

effective tool for social change. Led by Dr. Michael Hale.

From: GU.District.Announcements
Sent: Monday, September 23, 2024 12:37 PM
Subject: Join us in Dismantling False Narratives
Attachments: Dismantling False Narratives Oct 2024 (1).png

Dear SRJC community,

Please join the Santa Rosa Intercultural Center for our "Dismantling False Narratives" workshop series in October. Food will be served at all events in this series. Please join us, bring a friend, and please share with your students.

Dismantling False Narratives

This series is aimed at challenging and countering harmful dominant narratives that intend to criminalize, scapegoat, and dehumanize whole communities for political gain. During these workshops you will be able to identify harmful narratives, their root assumptions, and how to address them with facts, humanizing principles, and a social justice lens. For more details and events, visit: <https://intercultural.santarosa.edu/events>

OUTLINE OF CHAPTERS (New or substantially revised chapters are highlighted)

Introduction: Who Will Listen To 'The Sad Silent Song' Of the Working Class?

Chapter I: Mills And Buckley Chat about the New Deal Over Coffee

One defining feature of the last 50 years is the growing anger towards liberalism. Over time, this consensus has become what Gramsci describes as a “common sense”—to the point where even a dyed-in-the-wool New Deal liberal like Bill Moyers admitted “in our country today, the last thing most people want to be called—let alone politicians—is a liberal.” Just half a century earlier, in contrast, Lionel Trilling famously said: “In the United States at this time liberalism is not only the dominant but even the sole intellectual tradition. For it is the plain fact that nowadays there are no conservative or reactionary ideas in general circulation” (xv). Between great majorities of people calling themselves “liberals” and feeling confident they lived in a stable New Deal consensus to almost no major politician wishing to be associated with liberalism today, there is a story that needs further investigation. The road to that investigation must acknowledge the anti-New Deal organizing by social movements on both the right and the left in the 1950s and 1960s. But that leaves the question unanswered, what happened to the anti-New Deal organizing from the left? If they were both organizing against the New Deal, why did the right’s movement become popular while the left’s did not? One way of investigating this question is to imagine the activist intellectuals who inspired the New Left and the New Right sitting down for coffee. While the New Left and the New Right critiqued the New Deal, how their leading intellectuals formulated their critiques, to whom they addressed their critiques, and their vision of a more perfect society differed greatly. As a result, their political strategy and thus their political success—measured by their ability to help form a “collective will” around a multidimensional “common sense”—differed greatly. Only the New Right was able to forge a new cross-class alliance (what Gramsci called a historical bloc) to realign the New Deal coalition and build a new hegemonic class project.

Chapter II: An Institutional, Intellectual, And Cultural History Of SDS

I develop an institutional, intellectual, and cultural history of SDS. I locate SDS’s history not only institutionally in the Intercollegiate Socialist Society, the League for Industrial Democracy (SDS parent organization), and the Student League for Industrial Democracy (SDS’s original name), but I locate its history intellectually by tracing the influence of its two most important intellectual mentors: John Dewey and C Wright Mills. One can find the development of a dissident anti-New Deal ethos grounded in Dewey and Mills’ view of participatory democracy influenced by republicanism. Dewey’s concerns about democracy were transmitted through his writings, through his leadership of SDS’s parent organization (the League for Industrial Democracy). Mills took Dewey’s foundation in republicanism and placed a greater emphasis on a critique of the stultifying effects of mass society on the prosperous working person. Lastly, I locate SDS’s orientation in the popular culture of the Beat movement—particularly Jack Kerouac’s *On the Road*. His novel encapsulates the frustration of a young post-WWII generation angry with liberal politicians and also with traditional institutions of worker’s militancy that had sold out for bigger paychecks. More than almost any other fiction writer at that time, Kerouac captured the structure of feeling of disaffected middle class youth who were building a defiant anti-bureaucratic ethos ground in a rejection of post-war prosperity enjoyed by a growing affluent organized working class.

Chapter III Following Mills: SDS’s Search for A Replacement Proletariat

Many scholars who comment on Mills’ views on the left’s traditional agent of change mainly focus on his 1960 advice to the New Left that they should abandon the “labor metaphysic” (“Letter to the New Left”). The few scholars who acknowledge Mills’ earlier pro-labor writings mainly contrast his 1940s opinions to his post-1951 opinions and conclude he had a drastic change of heart. Mills’ slide from optimism to pessimism during the 1950s is important to identify because it is largely the same trajectory SDS followed in the 1960s: i.e. initial guarded support that grew into looming suspicion built upon on a moralistic judgment of subservience to the corporate Cold War power elite. Because both of their analyses rested upon a republican foundation, when their view of the working class shifted from the “new men of power” to the “cheerful robots,” their fear of subservient people controlled by corporations led them to condemn the working class and seek new agents of social change. Even worse, because they substantiated their republican fears with a “power elite,” “mass society” thesis influenced by Max Weber, they saw inter-locking institutional hierarchies as overwhelming average working people. Except for small groups of dissenting young intellectuals, they felt the “iron cage of bureaucracy” was almost inescapable for the majority of working people. This pessimistic conclusion led Mills and SDS to reject the working class as sell outs to “the power elite” in Mills language or “the establishment” or “the system” in SDS’s language. The limitations their theory

placed upon their search for a replacement proletariat had dramatic consequences for their struggle to realign New Deal liberalism. This chapter will investigate SDS's search for a replacement proletariat following C Wright Mills' advice. It will accomplish this by focusing on the debates SDS had in their internal documents, conventions, manifestos, and polemical exchanges in New Left publications.

Chapter IV: 'Suddenly Everybody in SDS Said, I Am a Marxist'

I then examine three periods in SDS history. The first period was 1960-1963, where SDS attempted a tentative and cautious engagement with organized labor. The second period will be 1963-1965 where they establish the Education Research and Action Project (ERAP) and put it into practice. Lastly, the third period from 1966-1970 will focus on the debates between Progressive Labor Party and Revolutionary Youth Movement I & II organizations. In each of these periods, I will analyze the factional debates that informed SDS's decision making process. These debates are rarely studied and offer a surprising view of the development, trajectory, and decline of SDS. They also offer a surprising view of roads available but not taken by the early SDS. Investigating these debates uncovers a critical blind spot inside of SDS's realignment strategy that existed from the very beginning of the organization. If SDS members hoped to realign the Democratic Party and organized labor using a value-based politics grounded in republicanism, who was going to be the agent for realignment if they dismissed a large percentage of the constituency within the groups they wanted to realign? Potential replacements ranged in the debates throughout the 60s from an "interracial coalition of the poor" to small vanguard "foco" insurgent groups to "into the factory" workerists to finally simply highly educated professionals.

Chapter VI: Marxism 'Turned Upside Down': The New Right's War Of Position

This chapter will focus on debates over strategy during Nixon's 1972 campaign. The New Right was only too happy to organize the people dismissed by the New Left using a theory they called "fusionism" developed by William Buckley, Jr. and Frank Meyer (among others) and put into practice by Nixon's advisor Chuck Colson. It will trace the development of the New Majority strategy using archival documents available from the Nixon library. It will also look at the recruitment of Charlton Heston for this campaign. This chapter will use Gramsci's idea of the organic intellectual to investigate Heston's leadership role in the New Right.

Chapter VII: The New Left's Failed Replacement Theory

I investigate Frank Dutton's influential 1971 book *Changing Sources of Power* and his leadership over the reform of the Democratic Party presidential nomination process in the late 60s and early 70s. These procedural reforms brought the idea of abandoning the working class and replacing them with a coalition of highly educated professionals, minorities, and single women from theory to practice in a mass way, far beyond the reach of even the largest SDS convention, march, or radical magazine in the 1960s. In charting the New Left orientation of this leading Democratic Party intellectual, we learn how transformative George McGovern's 1972 campaign was for the immediate afterlife of SDS, to Michael Harrington, to Bill Clinton, all the way to the present.

Chapter VIII: Clinton, NAFTA, Immigration, And the Road to Trump

Much has been written about the vaulted success of neoliberalism under the "Reagan Revolution," but as Thomas Frank and others have noted, "it took a Democrat" to implement most of the neoliberal reforms that the Reagan Revolution only dreamt of implementing. And which Democrat did it take to accomplish this? The former manager of the 1972 McGovern campaign in Texas, Bill Clinton. While Clinton's massive increase in the prison-industrial complex and his deregulation of banking, Wall Street, and Telecom has received considerable scholarly criticism in recent years, less has been written about the North American Free Trade Agreement of 1994 (NAFTA) along with The Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA) as strategic missteps that contributed to the rise of rightwing populism. Also, even fewer people talk about how NAFTA and IIRIRA worked together to exacerbate the problem of undocumented immigration.

Chapter IX: Steve Bannon: Organic Intellectual for the MAGA Movement

Chapter 9 will explore Trump's advisor, Steven K. Bannon. Much like Nixon's advisor Chuck Colson's "New Majority" strategy, Steve Bannon's strategy of "MAGA" white-christian-nationalist populism effectively sutured together a durable coalition for Trump by focusing on how globalized trade and immigration devastated working class communities (among other issues). This coalition included a significant number of working class people (but not a majority), especially people who consider themselves white but also increasingly recruiting working class voters of color, especially in 2020 according to political strategists as diverse as Patrick Ruffini and Ruy Teixeira. Furthermore, despite the view popularized in the eulogies of Chuck Colson as being "reborn" in prison and living a

life of an evangelical prison minister, his “fusionist” strategy can be detected in current politics. Nowhere is this clearer than his attempts in the 1990s, funded by Eric Prince, founder of the private mercenary military group formerly known as Black Water, to fuse together a coalition of Evangelical and Catholic voters that Bannon took up with a passion. Furthermore, like Nixon’s recruitment of Charlton Heston, the MAGA movement’s recruitment of Roseanne Barr, the popular working class “everymom,” who was a former Peace and Freedom Party socialist presidential candidate with Cindy Sheehan in 2012, helped Trump win a shocking number of frustrated working class voters, especially in rustbelt swing states.

Chapter X: Conclusion, I will propose lessons for left organizers from the history I provide above.

NARRATIVE OF REVISIONS AND ADDITIONS

My dissertation focused on building an intellectual and cultural history of the New Left, represented by Students for a Democratic Society, and the New Right, represented by Nixon’s 1972 presidential campaign. I used the “labor question” as my principle of comparison and investigated why the New Right was ultimately successful in realigning the New Deal coalition. As I began revising my dissertation into a book, I wanted to move my narrative forward to our current political moment. In terms of the goal of realigning the progressive neoliberal coalition built by Clinton and Obama, Black Lives Matter and Bernie Sanders failed, and Trump was successful. Much like Nixon before him, Trump’s success was in realigning working class voters who predominately voted Democratic. Trump was able to realign first predominately frustrated working-class white voters in 2016 and then ultimately multi-racial working-class voters in 2024 into a Nationalist Conservative “America First” MAGA coalition. My dissertation explored Chuck Colson as one of the central intellectual architects of Nixon’s New Majority Strategy. In comparison, my new chapters explored Steve Bannon as one of MAGA’s chief intellectual architects. At the same time, my dissertation explored Nixon and Trump’s campaigns in terms of their mobilization of popular cultural figures. My dissertation explored Charlton Heston’s reversal from New Deal Democrat to a Nixon and Reagan supporting neoconservative. For my new chapters, I explored Roseanne Bar’s reversal from social democratic feminist to one of Trump’s most popular supporters.

My exploration of the construction of progressive neoliberalism is in the new chapters 7-8 (See table of contents above). My exploration of Steve Bannon and Roseanne Bar is represented in chapters 8-9 (See table of contents above). I re-wrote the introduction to reflect my new comparative intellectual and cultural history between two surprisingly victorious rightwing populists: Nixon and Trump.

Re: Book Proposal: From the New Majority to MAGA: Consequences of SDS'...



Submissions <submissions+noreply@versobooks.co
To Hale, Michael



8/27/2024

External

Thank you for your submission to Verso Books—this email is a receipt of your proposal. While we review every submission, the overwhelming number of submissions we receive means that we are not able to respond to each one. Should our editors wish to talk with you further about your manuscript, they will be sure to contact you within two months of the submission date.

Many thanks, Verso Books

(Please note that this is an automated response from an address that cannot receive replies—if you need to reply, please email submissions@versobooks.com)

CAUTION: This email originated from outside of the SRJC organization. Verify that the email address matches the Sender's Name. Do not click links or open attachments unless you recognize the sender and know the content is safe.

RE: Your submission to Haymarket Books



notifications@email.submittable.com

To Hale, Michael



8/27/2024



If there are problems with how this message is displayed, click here to view it in a web browser.

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

EXTERNAL



Thank you for submitting to Haymarket Books! Your submission will be passed along for review by our editorial board.

Because of the overwhelming number of manuscripts we receive, our review process may take up to four months from the date of your submission. If we find that your project fits within our current editorial priorities, we will contact you within that timeframe.

In solidarity,

Haymarket

Book proposal: From the New Majority to MAGA: Consequences of SDS's A...



Hale, Michael

To nhooper@ucpress.edu



8/27/2024



Hale Book Proposal -UCP.docx 93 KB

Niels Hooper,

Attached you will find my book proposal: *From the New Majority to MAGA: Consequences of SDS's Abandonment of the Working Class*.

BOOK PROPOSAL

From the New Majority to MAGA: Consequences of SDS's Abandonment of the Working Class

A specter is haunting the progressive left internationally: the specter of an ascendant neo-fascist populism. Specifically, frightening is the ability of rightwing populists to recruit a growing base of multi-racial working-class people from their traditional social democratic parties. Trump and the larger MAGA movement represent not only one of the most salient examples of this trend, but also a wellspring of inspiration for rightwing populists abroad, who are on the cusp of forming what some call a rightwing Populist International. The continuing popularity of MAGA has left many progressive commentators feeling like the world has turned upside down. The truly confounding part is that this also comes at a high point for left movements internationally, some even calling this “the decade of mass protest.” However, while left social movements have developed the capacity to become highly visible, and also to recruit healthy percentages of college-educated people, they have lacked an effective language and organizing strategy to recruit a broad cross-class coalition that includes working class people. This is one of the main issues that has blocked the left from becoming popular and building a counter-hegemonic movement to Neoliberal austerity and imperialist atrocity. Since the late 60s, New Right social movements have been more successful at realigning significant percentages of frustrated working-class voters using understandable populist appeals at the level of both electoral politics and popular culture. Center-left forces, since at least the 80s, largely joined the New Right in the dismantling of the social democratic safety net and building the “tough on crime” movement in order to chase largely mythical “centrist voters.” The main difference is that they did this with an overlay of progressive multiculturalism that appealed to their increasingly professional middle-class base. *From the New Majority to MAGA* seeks to investigate this story by focusing on two presidential campaigns, 1972 and 2016, and the social movements that supported them. Both elections featured shocking numbers of working-class voters changing their traditional political loyalties.

Electoral politics have seemingly become unmoored from the class-based electoral loyalties that defined most of the 20th century. Between 1932 and 1972, large majorities of poor and working people (low income/non-college) consistently voted Democratic, considered the party of the people, whereas college educated professionals, business owners, and old money (high income/high education) consistently voted Republican, considered the party of bosses and blue bloods. Between 1972 and 2016, with a few exceptions, that trend slowly reversed—accelerating dramatically after 2010. Nowhere is this more starkly represented than among college-educated professionals shifting to the Democrats and working-class voters, especially those who identify as white without a college education, shifting to the Republicans. The Democratic Party base now is increasingly high education/high income voters, while still maintaining the tenuous loyalty of the poorest voters (especially non-high school graduates). The Republican Party base now is increasingly low income, non-college educated voters, especially white voters—with smaller but increasing percentages of working-class voters of color—while maintaining the loyalty of the traditional Republican middle class and the wealthiest voters. Reflecting on recent elections, longtime Democratic consultant, Stanley Greenburg argues “The fact is that Democrats have lost support with all working-class voters across the electorate.” Even the editors of *Jacobin* admit, “Working-class voters shifted to the right across all racial groups.” *From the New Majority to MAGA* seeks to investigate the trend of working class dealignment from social democracy not as destiny but as a question of theory, organizational strategy, and leadership. Rather than a narrative that sees the Republican Party as benefiting by default from backlash resentment to racial or gender justice, what if it was more a question of which social movements decided to take a leadership position to organize these voters and which actively chose not to organize them, and which intellectual mentors, theories, and cultural producers inspired and supported these decisions?

Rather than a clear class analysis grounded in an investigation of power relations, liberal reporters often see class through the prism of an imagined cultural identity. In 2016, journalists were sent on a frantic search for an explanation to this reversal. The day after the election, *The New York Times* ran an opinion piece declaring “Why Trump Won: Working-Class Whites.” This is not the first time this has happened. Journalist Barbara Ehrenreich argued that in the aftermath of Nixon’s 1972 landslide election journalists “discovered the working class,” but “They did not discover the working class as it was—in the late sixties and early seventies—caught in the greatest wave of labor militancy since World War II. They discovered a working class more suited to their mood: dumb, reactionary, and bigoted.” Similarly today, rather than a multiracial, downwardly mobile group of people suffering under the austerity and dehumanization of Neoliberalism and fighting back in both productive and unproductive ways, the “working class” reporters “discovered” were/are unorganizable “deplorables” mobilized by an unchanging, almost atavistic, irrational fear and resentment. However, these are the very people who were once thought to be one of the

pillars of the New Deal coalition as well as the most important agent of social change for the old communist left, but now largely feel left behind, ignored, or forgotten by left social movements and the Democratic Party. What happened? For all of the recent emphasis placed on the so-called white working class, *From the New Majority to MAGA* argues that the fantasy of abandoning the entire working class has a much longer history than current reporting explores and implicates the radical left to a far greater degree than often acknowledged. This book will argue we are living with the consequences of theoretical debates about the strategic importance of the working class within student-driven factions of the New Left and the New Right between the 1950s and 1970s.

While the New Left and the New Right were large umbrellas that contained many often-opposing organizations, this book will focus on the two largest radical student organizations, Young Americans for Freedom (YAF) and Students for a Democratic Society (SDS) along with their intellectual mentors and the circle of leaders they influenced. Founded in 1960 with the publishing of the Sharon Statement, while being relatively small compared to SDS, alumni of YAF had a profound impact on reshaping mid-century conservative thought. YAF was influenced by a range of New Right mentors, but this book will focus on William F. Buckley and the circle he inspired and led. In contrast, founded in 1962 with the publishing of the Port Huron Statement, SDS was the largest radical left social movement since the Communist Party of the United States in the 1930s. While SDS was influenced by a range of radical dissident intellectuals, this book will focus on C. Wright Mills and the circle he inspired and influenced.

SDS and YAF both started as insurgent radical movements. Both developed new theories for social change that attempted to move beyond New Deal liberalism, the communist old left, and the blue blood old right. For a time, both attempted third party or revolutionary alternatives, but as the prospects of revolution receded at the end of the 60s, segments (but certainly not all) of both SDS and YAF, and the Boomer political leaders they influenced, re-entered traditional electoral politics, reshaping both the Democratic and Republican parties. However, they brought very different organizing strategies informed by very different theories of social change. This book will focus on contrasting theories of the significance of the working class as an agent of social change.

From the New Majority to MAGA looks at the 1970s and the 2010 as time periods where the political order in the United States entered a crisis of legitimacy. Both elections featured a vexing class inversion that came in the aftermath of failed left social movements which promised hope and change for millions. In both periods, left and right social movements competed in order to build counter-hegemonic coalitions to realign first the New Deal order and then the Neoliberal order. Both Nixon and Trump tapped into a republican producerist language animated with masculine white supremacy that has driven populist campaigns since at least the Jacksonian era. Republicanism in this sense means a tradition of western thought descended from Greco-Roman, Renaissance, and English sources that stress virtue through autonomy and civic participation, but at its core it is animated by fear of societal corruption and disorder due to a loss of self-determination. The fear of aristocrats and plutocrats forcing average working people (especially white people) into slavery animates a wide array of American republican thought from the Declaration of Independence's fear of "absolutism," and "tyranny" to Roosevelt's fear of "economic royalists" during the Great Depression, to the New Left's fear of the "Power Elite," to the New Right's fear of "government bureaucrats" and "pointy headed intellectuals" telling you how to live your life. Producerism is the fear and enmity of people at the bottom who succumbed to being controlled (eg. the New Left's "cheerful robot" or the New Right's "welfare queens" or "illegals").

While both the SDS and the New Right used a republican populist vocabulary, the striking difference is that influential factions of SDS used this vocabulary to reject the working class. They were "cheerful robots" subservient to the power elite through mass consumerism and Cold War nationalism. In contrast, the New Right sought to draw in the very working-class people rejected by the SDS and animate them, albeit duplicitously, with a sense of power that they were the "real Americans" using FDR's very language of protecting the "forgotten man." Despite small Leninist/Maoist factions of SDS also having workerist approaches, large factions of SDS concluded the working class were irredeemable.

By studying each movements' intellectual mentors, internal strategy documents and debates, and the ways they attempted to popularize their movements at the level of popular culture, *From the New Majority to MAGA* makes a simple argument: the strategy of the several influential factions within SDS sought to reject the working class as the agent of change, especially the white working class, was a stunning failure of leadership, a failure that Nixon's "New Majority" strategy, led by Nixon's advisor Chuck Colson, cleverly exploited. This failure was not

confined to the 1970s. This book seeks to show how the MAGA movement continues to exploit the rejection of the working class to powerful effect today. Trump's embrace of whom Hillary Clinton called "deplorables" is one of the strategic foundations of his popularity and the larger rightwing international populist movement led by his advisor Steve Bannon. The comparison between "pro-worker" rightwing populisms espoused by both Nixon and Trump provides an interesting way of understanding their popularity. In addition to intellectual mentors, *From the New Majority to MAGA* will also look at how New Right strategists recruited celebrity figures who were once on the left in order to popularize their movement. While the chapter on Nixon focuses on the recruitment of Charlton Heston as a symbol of an everyman, the chapter on MAGA focuses on the recruitment of Roseanne Barr as symbol of an everymom.

Rather than a careful investigation of this class dealignment in voting patterns, many left-liberal observers throw up their hands and see it as a foregone conclusion owing to what they see as the essentially conservative and racist nature of the American working class who are easily manipulated "cheerful robots" that "vote against their interests." Or they argue a version of the backlash narrative: blaming some sort of "leftwing extremism" be it Bernie Sanders, "woke educators," LGBTQ activists, or Black Lives Matter organizers today or the Weathermen, Black Panthers, Civil Rights, or Feminist movements 50 years ago who frighten an essentially conservative white working class. "If it wasn't for those stupid, conservative voters," or "if it wasn't for those damn radicals," Democrats would win, the standard arguments go. As a result, many progressive election strategists argue working class people, especially those who identify or are categorized as white, should just be abandoned to the Republicans in favor of a dream coalition of educated professionals in alliance with upwardly mobile or aspirational people of color, single women, and a growing array of identity-based and issue-based groups as the new force of social change. Today, this group is often referred to today as the "coalition of the ascendant." *From the New Majority to MAGA* argues this dream was first developed in debates between workerist factions and factions that rejected what their intellectual mentor called "labour metaphysic." In his famous "Letter to the New Left," Mills looked to the "students and young professionals" as the principal agents who could stop the "main drift" towards the "managed integration of a corporate state." The SDS factions that rejected the working class, went on to have an outsized influence on the Democratic Party's post-60s orientation away from the working class and towards the educated professional class strata. A group of people who are rejected do not go away, and they do not necessarily continue to vote for Democrats because they "have nowhere else to go." They become susceptible to other movements who choose to recognize them, even if opportunistically.

After SDS imploded in 1969, many members and fellow New Leftist retreated back to the Democratic Party. Alumni of SDS through the New Politics, New American Movement, and Democratic Socialist Organizing Committee/Democratic Socialist of America factions among other post-New Left formations had a profound impact on reshaping Democratic Party politics away from its traditional grounding in the working class. After losing the battle to rearticulate the New Deal coalition to the New Right, by the 1980s, in the face of the misunderstood ascendancy of Reagan, fighting for a slightly more progressive version of Neoliberalism became in Michael Harrington's words "the leftwing of the possible." Helping the Democratic Party compete for educated, middle class, and suburban voters all the while ignoring the growing poverty and misery of one of their formerly most loyal constituencies proved to be a death spiral for a solid Democratic majority and the nadir for independent socialist politics in America. The Mills-informed New Left theory that the working class was too complacent to ever become radical and should be abandoned for coalitions led by college educated people had a certain aspirational logic until progressives watched those very people they abandoned become increasingly radicalized under the leadership of another political project that did not see them as "cheerful robots," "deplorables," or a natural constituency of the Democratic Party. *From the New Majority to MAGA* will investigate this descent by tracing the continuing significance of the 1972 McGovern campaign. Examining Frank Dutton and Bill Clinton's roles in that campaign and their role in the Democratic Party up until today helps us explore some of the continuing repercussions of SDS's rejection of the working class. Clinton was able to stitch together the New Politics and New Democrat factions and bring along small percentages of the old New Deal coalition. Together, this new coalition built progressive Neoliberalism that undercut much of the safety net for poor and working people. This book will chart the ongoing consequences of several policy missteps, specifically the under-explored interplay between free trade and immigration restriction, that have fueled the rise of the populist right.

For over 60 years, "the coalition of the ascendant" has been consistently frustrated, with rare exceptions in 1992 and 2008. While being a minority nation-wide (approximately 35% of voters today, down from 85% in 1945), working class people who identify or are categorized as white without a college education are a majority in several

“swing states” and therefore have political power beyond their relative size, especially in the Electoral College. Also, because of the history of white supremacy and patriarchy, the image of the white male industrial worker looms large in the public imagination, even among factions of the workerist left. In terms of electoral math, even small percentage shifts of white working-class voters combined with even small percentages of defections from non-white working class voters then ultimately combined with the larger traditional Republican group of voters, swings elections. These types of rightwing populist coalitions have thwarted many progressive hopes from presidential elections to labor reform to immigration reform to reproductive justice and beyond. The consequence of ignoring the working class among center-left social movements have been grave.

PROSPECTIVE AUDIENCE

Because I am writing an interdisciplinary, intellectual, cultural history, *From the New Majority to MAGA*, this book would find an audience in American Studies, Cultural Studies, Literature, Labor Studies/Working Class Studies, and Sociology classes focused on social movements. It would also find an audience among the new revival of Gramscian scholarship. Moreover, social movement activists, particularly those who lived through the 1960s, as well as a younger generation of activists looking for an understanding of social movements in the United States would be a popular non-academic audience.

Readers who have been devouring books like *Hillbilly Elegy* among others looking for a deeper analysis of political dealignment/realignment to help explain the deeper history of the 2016 election could also be a popular audience. While *Hillbilly Elegy* is a popular book, its social conservatism perpetuates an essentialized, dehistoricize view of working-class people who think of themselves as white, rather than a group of people who are socially constructed in a class and racial formation project.

And, crucially, this book would find a place along with the recent publishing of a number of memoirs and reflections by SDS activists and those inspired by SDS. The recent 60th anniversary of the founding of SDS (1962), the 55th anniversary of the breakup of SDS (1969), and the 50th anniversary of Nixon’s 1972 election provide an excellent moment to reflect on these questions in order to enhance our understanding of the 1960s.

SIGNIFICANCE AND UNIQUENESS

No academic study has explored leading factions of SDS’s rejection of the working class in relation to how the New Right embraced the working class and the continuing consequences of those strategy reversals. Nixon’s New Majority strategy paved the way for the largest electoral landslide in the twentieth century that featured 57 percent of manual laborers voting for Nixon—a 25-point increase over 1968, according to historian Jefferson Cowie. This trend only increased with the Reagan Revolution and continues today with Trump’s MAGA movement with no apparent end in sight. Hilary Clinton’s famous “blue wall” in the rustbelt, crumbled under the weight of significant white working-class defection and working-class voters of color who were either unmotivated to vote or voted for Trump in small but surprisingly increasing numbers between 2016 and 2020. According to Mike Davis in 2016, “Trump beat the union vote of the previous three Republican candidates and in Ohio won a flat-out majority” and increased that in key battleground states in 2020. Recent polls for the 2024 election predict a similar pattern, including shocking increases in Black, Latino/a, and Asian working-class voters considering Trump. The comparison between “pro-worker” rightwing populisms espoused by Nixon and Trump provides an interesting way of understanding their popularity. Teamster President Sean O’Brien’s speech at the 2024 RNC and his elevation of the “pro-worker,” “anti-corporate” populism of Trump, JD Vance, and Jeff Hawley is reminiscent of Peter J. Brennan, President of the Building and Construction Trades Council of Greater New York embrace of Nixon after the Hard Hat Riot in 1970.

Memoirs from SDS participants

I argue memoirs of the 1960s from leftwing activists generally suffer from a crushing sense of loss that borders on fatalism. These would include those published in the 1980s such as Gitlin’s *The Sixties Years of Hope Days of Rage*, Tom Hayden’s *Reunion* to the more recently published books commemorating the 50th anniversary of the Port Huron Statement such as *Inspiring Participatory Democracy: Student Movements from Port Huron to Today* and *The Port Huron Statement Sources and Legacies of the New Left’s Founding Manifesto*. While many memoirs from the first generation of SDS activists argue that the Weathermen faction developed an unpopular radicalism, they are unable to point that same critique at the early years. By placing SDS’s early years into the larger cultural and intellectual framework inherited from their 1940s and 50s intellectual mentors such as Mills, one can understand how SDS’s early theoretical formation influenced their essentialism and fatalism and contributed to their

rejection of the working class. To condemn working people as fixed “cheerful robots” is to see them fatalistically as un-organizable machines. Rather than the Weathermen’s brand of apocalyptic radicalism coming out of nowhere in the later decade, I argue that critical missteps in the early decade—inherited from their intellectual and cultural mentors and exacerbated by the frustration of a failed political strategy—are connected to the rapid move to a more militant and apocalyptic politics in the later years, and finally back to a fraught alignment with a Democratic Party drifting ever farther to the neoliberal right.

Gramscian Scholarship

The question of why some social movements failed in the anti-New Deal upheavals of the 1960s and the anti-Neoliberal upheavals in the 2010s is crucial. *From the New Majority to MAGA* follows the tradition of radical polemical intervention in the problematic ways leftwing movements analyze the New Right’s electoral successes. Books like Stuart Hall’s *Hard Road to Renewal* and *Policing the Crisis* as well as more recent books like Naomi Klein’s *Doppelganger* among others are models for this book project. While the New Left was a broad umbrella of organizations, SDS’s failure is key to unlocking the larger failure of the New Left and the rise of the New Right. SDS was substantially larger than other New Left movements by almost every measure: membership, geographical reach, number of leaders, financial support, and traditional institutional support such as unions and foundations. By 1968, SDS had over 100,000 members and 350-400 chapters across the entire country—including rural American college towns (Sale “Appendix”). SDS had the potential to popularize radicalism across a broad coalition of Americans, and because most of their membership was white, they were particularly positioned to speak to working class white Americans who became the base of Nixon’s “New Majority” realignment strategy all the way up to Trump’s MAGA coalition. Yet, it is those same people the SDS abandoned, despite appeals from Black Power and Vietnamese leaders.

From the New Majority to MAGA works through an accessible and empirically grounded mobilization of Antonio Gramsci’s theoretical importance for thinking about intellectual leadership and failed social movements. This is no arcane endeavor as a significant renaissance in Gramsci scholarship has occurred in the last ten years. Gillian Hart, Timothy Brennan, Peter Thomas, Fabio Frosini, and James Martin’s recent research—along with Marcuse Green and Joseph Buttigieg’s project to completely translate Gramsci’s prison writings have revitalized an arguably more accurate understanding of Gramsci’s complex view of hegemony (among many other concepts). *From the New Majority to MAGA* will employ a Gramscian theoretical approach that emphasizes internal organizational choices and the politics of intellectual leadership (broadly defined) both at the level of political theory and cultural struggle. Antonio Gramsci’s theory of hegemony, resuscitated with the aid of the new renaissance of Gramscian scholarship in the past 20 years, which makes him so compelling in the American context for understanding many of the failures of the 1960s social revolution as well as the failure of social movements in the 2010-to the present. Gramsci studied history to understand the potential for socialist revolution, but he never lost sight of the painful fact that revolutions could be subverted and that revolutions could fail not because of their destiny but because of their theories, strategies, and choices.

Current Scholarship

To understand Trump’s popularity with so-called working-class whites, academic readers have desperately turned to Joan C. Williams’ *White Work Class: Overcoming Class Cluelessness in America* and others like it as primers on white working-class frustration. However, to varying degrees, these studies look at the “white working class” as Andrew Perrin’s review of several of these books calls “fixed, static, and authentic” rather than seeing working class white identity as a project of class formation intersected with historical, gender, racial, and class cross currents.

Other academic studies on Trump’s popularity focus on the psychology of resentment as the key driving factor. Crammer’s *The Politics of Resentment*, Hochschild’s *Strangers in their Land*, Rosenthal’s *Empire of Resentment*, Judis and Teixeira’s *Where Did All the Democrats Go*, and Kuhn’s *Hardhat Riot*, Ruffini’s *Party of the People Inside the Multiracial Populist Coalition Remaking the GOP*. Rick Perlstein’s *Nixonland*, Robert Mason’s *Richard Nixon and the Quest for a New Majority*, and Jefferson Cowie’s book *Stayin’ Alive* all make important contributions to understanding Nixon and the rise of the New Right. Thomas Frank’s *Listen Liberal* (a play on C Wright Mills’ same title published in 1962), Gary Grestle’s new book *The Rise and Fall of the Neoliberal Order*, and Lichtenstein and Stein’s new *Fabulous Failure The Clinton Presidency and the Transformation of American Capitalism* make equally important contributions to the new scholarship about the rise and fall of neoliberalism. Newman and Skocpol’s *Rust Belt Union Blues* use an innovative approach to understand the decline of union’s involvement in civic life of working-class communities. All these studies look at the rise of neoliberalism within the framework of the New Left.

My book project builds on these studies and provides a more specific focus on factional struggles in the New Left and the politics of intellectual leadership based in deeper archival research in order to provide an important prehistory to the rise of Nixon and Reagan and the fracturing of the New Deal in the 70s and neoliberalism in the 2010s.

Sabbatical Leave Report

A. Applicant

Name: Michelle van Aalst

Department: English

Type of Leave: Curriculum Development

Leave date: Spring 2024

B. Purpose of Leave

The purpose of this leave is to conduct research on English 10, Introduction to Environmental Literature. Many changes have been made to the environmental literature canon over the past few years.

C. Objectives

1. Researched articles, journal entries, books, and other schools that have a focus on environmental literature and that include a variety of perspectives in order to update the curriculum.
2. Created a syllabus for the course and prepared lectures in order to teach the course.
3. Created a presentation based on my research and a bibliography of new texts for my department and prepared the course to meet curriculum review. I discussed with my department the reasons why I felt compelled to this particular area of study. I was inspired by my work with our previous colleague, Lauren Servais, to update the course outline. During the department meeting I covered the following topics: my motivation to teach the course, what I did to prepare for the course, and how exciting it was to have this course as part of the tenured class cycle of class offerings.

D. Narrative

The purpose of my sabbatical was to research articles, journal entries, and books that have a focus on environmental literature. In addition, my objectives included looking at other courses that have been taught face-to-face and online. Prior to the course being updated, the older course outlines described the foundational texts normally associated with the subject, including works by Henry David Thoreau, Edward Abbey, Wendell Berry, Mary Oliver, and Ralph Waldo Emerson. In examining my goals for the course, I wanted a complete representation of these traditional writers and to include other voices that reflected the changing narrative of how we see nature, how we use nature, and also the effects of climate change. What was once a study of beauty, Environmental Literature now includes science, sociology, and activism. As this would be a one-semester course, the syllabus would have to be updated each semester to reflect the timeliness of some of these topics. I would, however, retain so much of the beautiful appreciation of nature and the restorative properties of exploration. I would be mindful of maintaining this balance between awareness and beauty. Some of the colleges or classes I found

useful included NYU's Arts and Science course "Literature and the Environment", San Jose State University's "Literature and the Environment", and Stanford University's "Environmental Humanities." In researching these colleges and others, it was clear that this one course can be interpreted a variety of ways, and that the canon has changed and will continue to change each year that passes, each season that passes. One cannot escape the effects of climate change, even in the presence of beautiful nature writing. This fear of what has been lost and what will be lost is ever present. The research described in this narrative provided a deeper understanding the new canon as well as ways to teach this course.

E. Evaluation Summary

1. How will the objectives of this sabbatical leave enhance my work performance at the College? The Introduction to Environmental Literature course outcomes and objectives have been updated to reflect our current environmental situation. I have been teaching composition for almost 25 years, 11 of which have been at SRJC. Though I have taught Introduction to Literature, I have never taught this particular course. It is important for our College to have instructors who can teach composition and literature. I also would like to see my composition students use their skills in one of my literature classes in the future. Students like to follow their teachers into other classes, especially when they appreciate the instructor's teaching style.

2. How will the objectives of this sabbatical leave benefit students in my discipline?

Introduction to Environmental Literature is one of our department's specialized, or tenured, English classes. Having a diverse selection of courses helps not only the students who wish to take a course in literature, but also allows English majors to have more choices. My research improves Introduction to Environmental Literature for our students by including works from an ecological perspective as well as a celebration of the natural world. Students who take my Introduction to Environmental Literature course will be benefited by a comprehensive syllabus that includes the new concerns of this subject.

3. How will the objectives of this sabbatical leave benefit my Department?

With my research and my readings, I can teach the course using what I have learned over my sabbatical. I will also use my skills and experience as a certified University of California Naturalist and as a seasonal docent with the Winter Wildlife program at Point Reyes National Seashore to further my studies and benefit my instruction in this course.

4. How does your proposed project address the SRJC Strategic Plan and/or your Department's educational plan?

My sabbatical project specifically addressed the objectives in SRJC's proposed 2022 Strategic Plan of "offering exceptional educational programs and by raising awareness of social and cultural responsibility as it relates to the environment." As part of SRJC's Core Values, which includes "Our Responsibility to Society and the Environment expressed in our commitment to

social equity and sustainability”, this course focuses on aspects of contemporary United States culture from an ecological perspective.

F. Abstract for Board Report Summary

Michelle van Aalst desired to research and prepare for the course English 10, Introduction to Environmental Literature. Her objectives during her sabbatical were to research this course and create a syllabus that reflected works from an ecological perspective as well as a celebration of the natural world. Her hope is to bring the beauty and awareness of our natural world to Santa Rosa Junior College students through classic and contemporary literature on this subject. “We need the tonic of wildness...At the same time that we are earnest to explore and learn all things, we require that all things be mysterious and unexplorable, that land and sea be indefinitely wild, unsurveyed and unfathomed by us because unfathomable. We can never have enough of nature.” ~ Thoreau

G. Appendices

Syllabus

Sample English 10 Assignment

Sabbatical Leave Report

A. Applicant

Name: Sean Martin

Department: Philosophy

Type of Leave: Independent Study

Leave Dates: fall 2024

B. Purpose of Leave

I requested this sabbatical leave in order to develop materials that will introduce students to a more inclusive and diverse conception of the field of philosophy. To this end, I have conducted an independent study of a seminal figure of Spanish letters, Miguel de Unamuno, and produced learning aids for use in Philosophy 21: History of Philosophy, Modern. Unamuno is an exemplary and pivotal figure in that he was both conversant in, and also sharply critical of, the philosophical and literary conventions (predominantly post-enlightenment and positivist) that dominated European and Anglo schools of thought at the time. In challenging these conventions, Unamuno contributed to the development of modern Existentialism as well as influencing distinct philosophical movements throughout the Spanish speaking world including in the former Spanish colonies in Latin America. In introducing students to Unamuno's work, I will provide a more accurate representation of the dynamic and dialectical nature of philosophical history as it has developed across diverse cultures and historical eras.

C. Objectives

1. I have developed an annotated chronology of Miguel de Unamuno's life with special focus on his literary and public career.
2. I have developed a written account of key elements in Miguel De Unamuno's philosophical view and describe how Unamuno's work influenced prominent 20th Century philosophical movements in Europe and Latin America.
3. I have created instructional aids (e.g., lecture outline, discussion topics, and assessment tools) regarding Unamuno's critical assessment of the modern Western Philosophical canon (resulting from objective 1 and 2) to be incorporated in Philosophy 21: History of Philosophy, Modern.

D. Narrative

Objective 1: For the first stage of this project I produced an annotated timeline of Miguel de Unamuno's life and works. In order to complete this timeline, I read numerous books and articles regarding the Miguel de Unamuno's biography as well as key historical events in

Spain during Unamuno's life. Though not all of Unamuno's publications are included in the timeline (as he published far too many articles to feasibly incorporate without thereby undermining the purpose of the timeline) I did include his most important works, especially insofar as those works pertain to the development of his contributions in philosophy.

Unamuno considered himself a "philosopher of life," concerned primarily with the role of philosophy as it informs the concrete conditions of life. Thus, Unamuno's works both reflected and informed every aspect of his lived experience. Of great importance is Unamuno's view of the concept of truth. He believed that genuine truth cannot be conveyed in mere propositional form, but instead must be lived. This is to say, all truth is lived truth, and so the ideal for a philosopher is to "live in truth." His critical approach to other philosophers was to make close examination of each philosopher's life and then determine whether that life represented an authentic appropriation of the principles entailed in their philosophy. Unamuno insists that this is a measure of any philosophical idea, and so it is essential that, in examining Unamuno's philosophy, students consider how this philosophy impacted Unamuno's life.

Unamuno's life spanned a period of radical upheaval, entailing the 3rd Carlist War, the Spanish-American War, the first World War and ended just prior to the Spanish Civil War. As a public figure, his contributions to these conflicts sometimes drove him into exile or imprisonment. He viewed his life as an effort to reconcile his identity as a member of the Basque minority along with its fierce sense of cultural and political independence, with his identity as a Spaniard that embraced the cultural plurality of the nation. Unlike most prominent philosophers of his time, he chose to remain engaged with his religious faith (though his view of faith, grounded in doubt, was highly controversial and deemed by the Church as heretical) despite (or, perhaps, specifically due to) its conflict with the scientific positivism that so pervaded the intellectual world at the time. Unamuno's view of faith, reason, along with their interdependence and conflict, was central to his philosophical development as well as his view of Spain's national development following the end of the Spanish-American War. Unamuno's struggle with the contradictions that emerge between faith and reason is evident in key events in his life, as recorded in the timeline. Further his development of style, where he produced numerous innovations in literature which reflected his philosophical ideas, are also correlated with events in his life, as well as historical events impacting the Spanish nation.

As an early proponent and influential precursor of 20th century existentialist thought, Unamuno was committed to the study of human *being*. He was a champion of the unique individual yet insisted on a universal capacity to understand all beings of "flesh and bone." And like other existentialists, he believed human freedom and consciousness was best understood as situated in a particular factual arena (or what Sartre refers to as *facticity*). His engagement in matters of public import and political upheaval is consistent with the likes of other prominent philosophers (such as Sartre and Camus) who came to view the role of philosophy as necessarily manifested in praxis. This is to say that no understanding of Unamuno's written works can be considered thorough without reference to the historical events he engaged in. One must consider how those events influenced his views, sometimes in a manner that appears superficially inconsistent while remaining deeply coherent in a manner he attempts to articulate in his most important philosophical treatise, *The Tragic Sense of Life*.

Objective 2: For this objective, I produced a written account of key elements in Miguel De Unamuno's philosophical view and described how Unamuno's work influenced prominent 20th Century philosophical movements in Europe and Latin America.

In order to complete this objective, I first obtained access to every available work of Miguel de Unamuno that has been translated into English. Though many of Unamuno's works have not been translated, and some are out of print and no longer available (or practically so) I was able to gain access to a great many, including all of those works which are central to his philosophical contribution. This included dozens of books, essays, plays, poems, and letters of correspondence with other notable political and literary figures both domestic and international. In addition, I gathered dozens of secondary scholarly sources (i.e. books and articles in academic journals) pertinent to Unamuno's philosophy. Many of these are cited in this written account. In short, I obtained and read anything I could get my hands on, much of which contributed directly to this project.

Unamuno's writings cover the gamut of literary forms. His literary corpus includes novels, dramas, poetry, newspaper articles, prose essays, auto-biography, history, etymology and philology, as well as a mountain of correspondence. In each of these areas, Unamuno can only be described as a master of the first order. Though my aim was to focus on those works that were specifically pertinent to Unamuno's philosophical view, this was made difficult by the fact that Unamuno himself made no such distinction and insisted that his fictional and poetic writings were inseparable from his philosophical prose. So, the written account includes numerous references to Unamuno's novels and short stories in order to honor this element of his philosophical thought.

Objective 3: For this objective, I created instructional aids (e.g., lecture outlines, discussion topics, and assessment tools) regarding Unamuno's critical assessment of the modern Western Philosophical canon (resulting from objective 1 and 2) to be incorporated in Philosophy 21: History of Philosophy, Modern. To this end, I identified some key original writings of Unamuno which are both accessible to a typical community college student, and also representative of key aspects of Unamuno's thought. I found two such articles, *My Religion*, and *What is Truth*, particularly amenable to this end. Then, I developed a lecture outline in order to provide students an introductory account of key terms and themes in Unamuno's philosophy in order to facilitate their reading of these texts. Finally, I have produced some assessment tools (assignments) in which students are challenged to demonstrate both an understanding of Unamuno's ideas as well as provide their own assessment of those ideas. In particular, these assignments are designed for students to reflect on how Unamuno's philosophical views compare to other writers' views we have discussed over the semester while also providing students to situate their own philosophical ideas in comparison to those views.

E. Evaluation Summary

1. How did this sabbatical leave enhance my work performance at the college?

This project has provided me an opportunity to contribute to the districtwide effort to provide a more inclusive and diverse curriculum while also reigniting my own passion for studying and teaching philosophy. As a person of Basque identity, I've often been curious about Unamuno's philosophy, but have never had an opportunity in my formal studies to explore his work. Recently, while studying prominent philosophers in Mexico and Latin America, I was intrigued to find Unamuno's name pop up quite a lot. I find the process of tracing philosophical seeds across the Atlantic that were planted to develop new and unique philosophical movements in Mexico and Latin America particularly fascinating.

In addition, this project has challenged my current philosophical convictions, and hence, my ability to challenge my students. Many of Unamuno's views are directly contrary to my own considered judgements, particularly where consideration of faith in epistemology and metaphysics is concerned. In the process of working on this project, I have developed a greater appreciation for such views, and have modified some of my own while significantly broadening my own perspective as a result. By sharing my account of Unamuno's philosophy, and offering students an opportunity to seriously consider his views, I'm confident the exposure will help student become more curious and open-minded.

2. How did this sabbatical leave benefit students in my discipline?

This project will assist in addressing a common critique that most American philosophy departments, namely that they maintain too narrow a focus on a largely Anglo-European and analytical works. It helps to ameliorate the critique that academic philosophical work downplays the role that many prominent philosophical figures have played in support of ethnocentric and exploitative ideologies. Unamuno is, first and foremost, a philosophy of liberty who spent much of his career railing against the bigotries of his own nation as well as those throughout Europe. As our student body grows increasingly diverse and representative of populations most impacted by Eurocentric scholarship, it is incumbent on educators to provide access to critical perspectives of the dominant narrative that are both relatable while also encouraging a sense of belonging in the discipline.

3. How did the objectives of this sabbatical leave benefit my department?

My department has already invited me to present the results of this sabbatical project at a department meeting this semester. I am eager to do so and expect this will further a tradition of supporting each other's respective research and interests in our very diverse and complex field.

I am deeply grateful to have such brilliant and curious colleagues. As a group, we encourage and support each other's diverse interests in the field of philosophy. We frequently engage in discussion and collaboration as a result. For example, as a result of my colleague Michael Aparicio's recent exploration of the ancient Arabic philosopher, Avicenna, I have since incorporated that material (as a comparison) into my presentation of Descartes' metaphysical reasoning regarding the nature of human being. I expect that my colleagues will be similarly

intrigued by my study of Unamuno and that this will contribute to further expansion of the historical views we share with our students.

4. How did your proposed project address the SRJC Strategic Plan and/or your department's educational plan?

This project is well situated to support the strategies, goals and objectives of the newly adopted Strategic Plan of the district. In particular, the project will contribute to the development of culturally responsive andragogy (a component of object 1 in service of goal 1 under strategy 1). As a component of a core course in the Philosophy major it will likely inspire and prepare students for transfer and lifelong learning through critical thinking and civic engagement. (strategy 1, goal 2) Further, I believe this project is in service of the strategy of responsiveness to our diverse community. By introducing a critical figure that is both reflective of, and relatable to, a significant and growing segment of our student population, this project supports the district's effort to promote diversity and inclusion.

A key component of the Philosophy Department's mission is to "explore both western and non-western philosophical, ethical, and religious traditions." As an exemplary "bridge" between western and non-western traditions, Unamuno offers insight into both the continuity and divergence of philosophical themes and methods across the diverse human geography. This project also contributes significantly to the department's mission to "provide a unique opportunity to enrich one's ability to analyze and evaluate a wide range of questions faced in everyday life."

F. Abstract for Board Report Summary

Sean Martin conducted independent research and critical review of the philosophical and literary works of the Spanish Basque writer, Miguel De Unamuno. He developed an annotated chronology of Unamuno's works and provided a historical record of Unamuno's literary and public career. He also provided an original written account of Unamuno's anti-systemic, existential philosophy including Unamuno's radical understanding of faith as it pertains to core issues in the history of Philosophy. He has incorporated these topics into instructional materials to be used in Philosophy 21: History of Philosophy: Modern.

G. Appendices

1. Bibliography of texts read, studied, cited and included in the preparation of the annotated anthology.
2. Complete text of the annotated anthology of readings including original introductory materials.