# A. Applicant

Name: Filomena Avila

Department: Counseling

Type of Leave: Independent Study

Leave Dates: Spring 2020

### **B.** Purpose of Leave

In order to better serve student athletes more effectively at Santa Rosa Junior College and in preparation to compete athletically after transfer, I conducted an independent study of community colleges with model student athlete success centers. I researched how each of these centers provided the student success steps of orientation, assessment and academic planning. Additionally, I researched how the athletic eligibility requirements were embedded into the academic requirements.

# C. Objectives

- 1. Conducted research pertaining to best practices that incorporated academic and athletic success for students wanting to compete at the 4 year level.
- 2. Visited (and zoomed) with 3 community colleges with model student athlete success centers.
- 3. Visited one NCAA (National Collegiate Athletic Association) Division I, Division II and NAIA (National Association of Intercollegiate Athletics) school. These are the specific divisions that offer "athletic" scholarships.
- 4. Completed a mini student success guide for SRJC student athletes.
- 5. Interviewed 3-5 student athletes who have transferred successfully and incorporated their strategies with SRJC students.

# **D.** Narrative

Student athletes competing athletically at Santa Rosa Junior College and desiring to transfer and compete athletically at a 4 year university are challenged with meeting both academic university admission requirements in addition to the National Collegiate Athletic Association (NCAA) and the National Association of Intercollegiate Athletics Association (NAIA) athletic requirements for athletic scholarship consideration. As a specifically designated counselor assigned to work with student athletes, it is critical I know all requirements and understand how to best support our students athletes in achieving their academic and athletic goals. It is not uncommon for student athletes to focus on athletic requirements and sometimes not be as academically prepared for admission to a specific major. My sabbatical afforded me the opportunity further understand

the importance of academic requirements and how to best emphasize their importance in addition to athletics competition at the 4 year universities. Each university with whom I met emphasized that an academically prepared student will be more competitive for admission and progress timely toward their academic goal completion.

Objective 1: I conducted research by studying the NCAA and NAIA athletic eligibility requirements rules and bylaws. The best practice I found that incorporated these eligibility requirements was at Santa Barbara City College (SBCC). At SBCC, new student athletes are required to take a College Success for Student Athletes (PD 140, 1 unit) class. This class incorporates both NCAA and NAIA eligibility requirements while also teaching student success strategies for incoming new student athletes. Additionally, SBCC employs a coordinator of student success who works closely with the academic counselor and is responsible for their early alert system. The coordinator identifies students who are experiencing academic difficulties and works with the counselor to address next steps for identified students. SBCC is more intrusive with progress and follow up throughout the semester. The key factor to the success of this program is sufficient funding and an identified person that can coordinate a student athlete success program.

Objective 2: On February 18, 2020, I traveled to Santa Barbara City College and met with their lead athletics' counselor, Joann Graham, to learn about how they work with their student athletes.

As a result of Covid 19, I was not able to physically visit American River College nor Mt. San Jacinto College. However, I was able to set up a zoom session with both counselors and was able to gather information equal to that of what I gathered in visiting Santa Barbara City College. The only difference was the inability to visit an actual facility.

On March 18, 2020, I was able to zoom with American River College's dedicated athletics academic counselor, Diane Allie who receives additional assistance from an adjunct(s) counselor to meet with over 500 student athletes.

On March 24, 2020, I zoomed with Jen Burelson, lead athletic counselor Mt. San Jacinto College.

Objective 3: I was able to visit three transfer institutions: UC Davis (Division I), Dominican College (Division II) and UC Merced (NAIA). Each school's compliance officer was able to share the specific requirements for their institutions. Each school was unanimous in emphasizing the need to be academically prepared in order to compete athletically. Both UC Davis and UC Merced shared that because of the college admissions scandal, each was carefully reviewing their onboarding process to assure they aligned with each campus admission requirements and neither school gives out "special" admission tickets just because one happens to be an exceptional athlete. Each of these schools work closely with their perspective Registrar's Office to ensure students meet academic requirements. Dominican University, although private, emphasized the same. An academically well prepared student is stronger contender for an athletic scholarship.

Objective 4: I have prepared a one page simplified athletic eligibility guide for new incoming student athletes in addition to a more detailed 5 page guide for those wanting to delve further into the academic requirement for transfer to a 4 year university.

Objective 5: I was able to interview several student athletes who have transferred on successfully to a 4 year university. Although I originally set my goal to interview 3-5 students, I interviewed the following eleven transfer students. Some competed athletically after transfer, some are now working professionally and some chose to not compete after SRJC.

- 1. Marie Supanich, soccer, competed Ashland University in Ashland, Ohio.
  - Success strategy take a more proactive approach on using campus resources and use them early
- 2. Michael Ramazzotti baseball, competed at New Mexico Highlands, Las Vegas, New Mexico
  - Success strategy succeed at what you are good at in your sport. Coaches start looking at recruits in their first season.
- 3. Angelica Moralez- soccer, did not compete after transfer, Sonoma State University, Sonoma, California
  - Success strategy pay more attention on academics, focus on learning and taking in the information.
- 4. Kendall Grier football, competed at College of Mary, Bismarck, North Dakota
  - Success strategy establish residency first if you are an out of state student. Use all of the resources available to you.
- 5. Matt Kimura, baseball, competed at Colorado Christian University, Lakewood, Colorado
  - Success strategy attend class regular, stay on top of and complete your academic work and there should be no reason you can't pass a class if you are doing those things.
- 6. Mikie Segura track, competed at UC Riverside, Riverside, CA
  - Success strategy consider taking a third year and not rush to get out of SRJC in two years. You will be able to better develop both academically and athletically.
- 7. Taylor Horton track, competing unattached, Sonoma State University, Sonoma California
  - Success strategy don't take on too much academically in your first semester just because you did well in high school. Take the first semester to transition smoothly.
- 8. Jack McCormick swim, competing at University of Redlands, Redlands, CA
  - Success strategy time management. Set up a study structure early, get connected with a 2<sup>nd</sup> year athlete.
- 9. Lucas McCormick- swim, did not compete after transfer, CSU Monterey Bay, Monterey, CA
  - Success strategy take classes that fit your learning style, learn how to communicate with your instructor, never take the same class if the subject material doesn't agree with you, take classes with athletes (helps with bonding and can study together when traveling).
- 10. Jill McCormick swim, competed at UC Davis, Davis, CA

- Success strategy play the sport you end up coaching. Jill did not play water polo but coached water polo at SRJC.
- 11. Pete McCormick swim and water polo, did not compete after transfer, CSU East Bay, Hayward, CA
  - Success strategy find an athletic and academic balance, using tutoring and study hall, take advantage of office hours (this is a good life skill that can apply to meeting with your boss).

This was one of the most enjoyable parts of my sabbatical. A few common themes arose from each interview: time management, knowing campus and community resources, slowing down and not taking on too much too fast. Because of the athletic eligibility clock, student athletes often want to get to the 4 year as quickly as possible. Most emphasized allowing the first semester to learning how to navigate college and athletics, staying connected to instructors, their counselor and really using the numerous resources that exist at SRJC. As I meet with each student athlete individually, I incorporate resources into their educational plan so they are aware of the support that exists at SRJC. Additionally, with all new students, I discuss time management and the differences between high school and college. For those who are unaware of major options, I recommend Counseling 6, Introduction to Career Development. As a result of these interviews, I am reminded of the need to be more diligent in gathering information for new incoming student athletes. Additionally, post Covid, I plan to attend practices at least once a week to better connect with students other than when they are required to see more for an educational plan. The purpose is to develop stronger connections with each student athlete.

# **E. Evaluation Summary**

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

As a result of having dedicated time to research NCAA and NAIA requirements, I feel much more equipped to better support student athletes as they pursue both athletic and academic requirements. I now have identified contacts at the various schools that willingly expressed a desire to assist with any student athlete situation regardless where they desired to attend.

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

My experience visiting and speaking with other community college athletics counselors provided me with different strategies in working with student athletes. Seasoned athletics counselors know the rules of the road and how to work effectively with transfer institutions. As an example, some transfer schools do not consider a statistics course to meet as a math requirement for transfer. This is actually one of the most identified hurdles for student athletes. Seasoned athletic counselors provided me with strategies on how to advocate for students and also develop academic pathways to meet transfer requirement for admission and athletic eligibility. This allows me to show students they have options and they are not stuck with "one" pathway if they desire to compete athletically after SRJC.

3. How did this sabbatical leave benefit my department?

My department members will be able to use the guides I created to help with a student athlete should I not be available. Additionally, they will be able to use the resources on the NCAA and NAIA website as necessary. This information has been shared with the other counselors also assigned to working with student athletes.

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

Each component of my sabbatical was related to supporting student success. My visits with community colleges and NCAA and NAIA centered on how to support the student athlete while at the community college, preparing them for success upon transfer and how to meet all the admission and athletic requirements for a successful transition beyond SRJC.

# F. Abstract for Board Report Summary

Filomena Avila researched best practices for student athlete success centers and best practices for successful athletic eligibility preparation for a student athletic scholarship at the 4 year level. Filomena visited and zoomed with three community colleges with model student success centers in addition to visiting a Division I, II and NAIA 4 year transfer school. These strategies will be incorporated into her work with students competing athletically at SRJC and transferring to a 4 year institution.

### A. Applicant

Name: Anna Brown

Department: Mathematics

Type of Leave: Project

Leave Dates: Spring 2020

### **B.** Purpose of Leave

I analyzed the high school mathematics curriculum of several local high school districts and compared their course outlines of record to Santa Rosa Junior College (SRJC) mathematics courses.

### **C. Objectives**

- 1. I conducted a study of the mathematics curriculum of selected Sonoma County high schools based on the Common Core Mathematics Standards, grades 9 12. I analyzed the high school mathematics curriculum of several local high school districts and compared their course curriculum to SRJC mathematics course outlines of record. My objective has been completed.
- 2. I completed a written informational resource outlining my findings. This report has been made available to the Mathematics Department for use when updating the mathematics placement model and course revision and development required by the AB705 legislation. My objective has been completed.
- 3. I presented my findings to the Mathematics Department on September 18, 2020. I have applied (on October 7, 2020) to present my findings during the Spring 2021 PDA Day so that I can share my report to other parties who may be interested in this topic. My objective has been completed.

# **D.** Narrative

I used my sabbatical to look at how the implementation of Common Core Curriculum (approved by the California State Board of Education on March 7, 2012) has changed local high school mathematics courses and curriculum. With Common Core Curriculum, the knowledge and skills students need to be prepared for mathematics in college, career, and life are woven throughout the mathematics standards. In response to the adoption of Common Core, some local high schools have dramatically shuffled their mathematics course curriculum and their courses no longer follow historical naming conventions (such as Algebra I and Algebra II) but instead have names like Math 1, Math 2, and Math 3.

At the same time, there are also dramatic changes taking place at the community college level. Starting in Summer 2019, students entering SRJC were able to enter directly into transfer-level mathematics courses based on their high school GPA and last mathematics course taken. This is mandated by Assembly Bill 705 (AB705), which was approved by Governor Brown on October 13, 2017. For this reason, it is essential that the SRJC mathematics department understand the mathematical preparation of students entering our college.

# **Objective 1:**

In the first phase of my sabbatical, I sent emails and made phone calls to various Sonoma County high school superintendents, principals, and mathematics teachers explaining my interest in their mathematics course curriculum. I also researched their mathematics course curriculum on their school Websites. I initially contacted high schools in the Petaluma City Schools District and Santa Rosa City Schools District. I chose to focus on these districts because of the large numbers of graduates who come to SRJC to continue their education.

When a school responded to my inquiries, I made arrangements to visit a department meeting. During these visits, I gave a brief presentation on the recent mathematics course changes and placement process at SRJC and answered faculty questions about these and other topics. I would then ask questions about the high school's curriculum, often obtaining a course outline and informal information about how mathematics courses were taught at that high school. These were very productive discussions.

I attended a mathematics department meeting at Rancho Cotate High School on February 6, a department meeting at Petaluma High School on February 19, the SRJC/Sonoma County High School Articulation Meeting on February 28 (where I with faculty from Cloverdale, Santa Rosa, West Sonoma County, and Windsor), and a department meeting at Casa Grande High School on March 4. I had additional appointments to attend other department meetings after spring break. However, on March 17, the Sonoma County Health Officer issued a Shelter in Place Order due to Covid-19, and I was unable to continue attending department meetings in person. I continued to communicate with some high school mathematics faculty via email, but since faculty were overwhelmingly occupied with the transition to online distance learning, I was not able to attend any further meetings.

My original sabbatical proposal only mentioned Petaluma City Schools District and Santa Rosa City Schools District. However, since I was unable to continue attending meetings, I expanded my online research to the following Sonoma County school districts: Cloverdale Unified School District, Cotati-Rohnert Park Unified School District, Healdsburg Unified School District, Petaluma City Schools District, Santa Rosa City Schools District, West Sonoma County UHSD, and Windsor Unified School District.

As I gathered information from these high schools, I summarized and analyzed the information and compared the mathematics curriculum of these Sonoma County high schools to SRJC

mathematics course outlines of record. The SRJC Mathematics Department is very interested in students whose course enrollment was most impacted by the SRJC placement process enacted in Summer 2019 in response to the mandates of AB705. According to SRJC's current placement model, students in the lowest two tiers of the high school performance metrics (those who did not pass Algebra 2 or Integrated Math 3 with C or better and high school GPA 2.9 and above and those who did not pass Algebra 2 or Integrated Math 3 with C or better and high school GPA 100 GPA less than 2.9) are now eligible for Math 15: Elementary Statistics and Math 10: Nature of Mathematics without having to pass the Algebra courses that had been prerequisites for Math 15 and Math 10 before the changes mandated by AB705. For this reason, I compared the Algebra 2 and Math 3 curriculum of Sonoma County high schools to SRJC's Math 154: Elementary and Intermediate Algebra for Business and STEM and Math 156: Intermediate Algebra for Business and STEM.

# **Objective 2:**

Once I developed an understanding of the courses and curriculum offered by these districts, I wrote a report summarizing my findings.

# **Objective 3:**

I created a presentation of my findings and presented to the Mathematics Department on September 18, 2020. I have also applied (on October 7, 2020) to present my findings during the Spring 2021 PDA Day so that I can share my report to other parties who may be interested in this topic.

# **E. Evaluation Summary**

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

My research has given me a better understanding of the mathematical preparedness of students entering SRJC from Sonoma County High Schools. I better understand the mathematical strengths and weaknesses of students in my Math 15 and Math 10 courses, which has helped me to adapt my lectures to include relevant just-in-time remediation. I have also created more structured and scaffolded lessons designed to review and reteach necessary prerequisite Algebra skills. This is crucial to help students who did not pass Algebra 2 or Math 3 in high school to succeed in transfer-level classes when they may not have all of the necessary prerequisite mathematical skills.

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

Students will benefit because I now have a better understanding of the mathematical preparedness of students entering my classes. Students will have a better experience in my classes because I know which topics they may be struggling with if they did not pass Algebra 2 or Math 3 in high school. This knowledge has let me fill gaps in student knowledge with just-in-time remediation and lessons that are designed with additional support and scaffolding in order to review or reteach the necessary prerequisite Algebra knowledge. My

hope is that this approach will give underprepared students a better chance at passing a Math 15 or Math 10 class for which they may not have the prerequisite mathematical skills. I also hope that by giving underprepared students the additional support they need, they will walk away from my class with an appreciation for the beauty and elegance of mathematics in addition to the mathematical skills listed on the course outline.

3. How did this sabbatical leave benefit my department?

AB705 required a dramatic change in the way that students are placed into community college mathematics courses, and the SRJC Mathematics Department made several changes to our course curriculum that satisfy the requirements of the legislation and maximize our students' ability to successfully complete a course. By sharing the results of my sabbatical project with the Mathematics Department via a report and presentation, my departmental colleagues will now also have a better understanding of the mathematical skills students have when entering their classes. In addition, the information I have gained during my sabbatical will be very helpful when we evaluate the mathematics placement model and courses created in response to the mandates of AB705.

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

My sabbatical project addressed SRJC's Strategic Plan by fostering excellence in learning and academic excellence. It also addressed the Mathematics Department's dedication to promoting students' successful completion of their mathematics courses.

# F. Abstract for Board Report Summary

During her Spring 2020 semester sabbatical, Anna Brown conducted a study to examine how the implementation of Common Core Curriculum has changed local Sonoma County high school mathematics courses and curriculum. She analyzed the high school mathematics curriculum of several local high schools and compared their course curriculum to SRJC mathematics course outlines of record. This information has been made available as a presentation as well as a written informational resource for Santa Rosa Junior College Mathematics Faculty to use when updating or writing mathematics course curriculum, with the goal of satisfying the mandates of AB705 in a way that fosters student success and academic excellence.

### A. Applicant

Name: Dr. Dan Famini

Department: Agriculture/Natural Resources, Veterinary Tech Program

Type of Leave: Independent Study

Leave Dates: Spring 2019 and Spring 2020

#### **B.** Purpose of Leave

The intent of this sabbatical was two-fold:

- A. To successfully transition the SRJC Veterinary Technician Program through unprecedented regulatory changes imposed by the California Veterinary Medical Board on veterinary technician programs.
- B. To create a welcoming pathway to veterinary education for new students. After the new regulatory changes phase in, the Veterinary Technician program will no longer be a valid option for any students other than those who already have significant work experience at a veterinary hospital. This will exclude both students who are hoping to enter the veterinary medical field and those who are pre-veterinary. To serve these groups of students, new course pathways will need to be created, and additional opportunities for initial experience will need to be facilitated to ensure there are a sufficient number of students to feed into the Veterinary Technician program.

#### **C.Objectives**

- I continued to position the SRJC Veterinary Technician Program to qualify for the new accreditation process being created by the California Veterinary Medical Board (VMB) for "Alternate Route" programs. Since, the VMB failed to provide the required regulatory changes, I completed any possible changes in keeping with current requirements and created a new course (AnHlt 128: Exotic Animal Medicine). Please see attachments.
- 2) I created an "Introduction to Veterinary Careers" course that will be relevant for students exploring both pre-veterinary technician and pre-veterinarian paths. I initiated the creation of a Pre-Veterinary Major, which is currently working its way through the committee process.
- 3) I collaborated with local veterinary clinics and allied non-profit organizations to create a formalized opportunity for students to gain initial hands-on experience in the veterinary field.

#### **D.** Narrative

#### Objective 1:

During my sabbatical several factors including the onset of COVID prevented the regulating body (California Veterinary Medical Board or VMB) from providing changes governing the academic requirements for the California Alternate Route Program for the Registered Veterinary Technicians. As of now, the implementation of major changes has been postponed from Summer 2020 to Summer 2024. Additionally, the Veterinary Medical Board has signaled there may be further modifications regarding what the new mandated content will be.

Two sets of academic requirements are such that I cannot modify classes to meet many future curriculum requirements without it falling out of compliance with current regulations. As such, I have made what changes can be accommodated within the current regulatory framework. Additionally, I have created several working documents to prepare for the transition assuming there are no further modifications. I also drafted several CORs for submission once the timeline is appropriate.

Also, in response to these unforeseen circumstances, I created a new course (AnHlt128: Exotic Animal Medicine). This class has frequently been requested by students and completes the number of active electives (4) so that there is a smooth rotation of classes over each 2-year time frame. This course will expand the anatomy, terminology, and nursing concepts learned in core classes as they apply to companion animal avian, reptilian and small mammal patients. During this sabbatical, this class went from a vague concept to a fully approved course which will be offered in Spring 2021.

#### Objective 2:

An Introductory to Veterinary Careers course was submitted, managed through the approval process, and is now being offered. As of Fall 2020, I have two full sections of AnHlt101 (Introduction to Veterinary Careers). The initial content for this class was also started during this sabbatical. Thus far, the class seems to be meeting its primary objectives of providing insight to students interested in the DVM and RVT pathways, improving the appropriateness of course enrollment for such students, and starting to create a sense of community among preveterinary students.

The Pre-Veterinary Major has been initiated and is currently working its way through the approval process. It is currently on track to be in place as early as Fall 2021, pending approval from the various groups external to the SRJC. Creation of the Veterinary Assistant program has been delayed. The purpose of this certificate is to become a steppingstone towards the Veterinary Technician program once additional entry requirements are imposed by the VMB. Pending the future regulation changes from the VMB, this will still be pursued in the future.

#### Objective 3:

I created a collaboration between several animal shelters and local veterinary clinics to create a new student experience. This has been formalized into AnHlt122 and 122L Animal Nursing Field Seminar. In this course, students are introduced to basic hands-on techniques utilized in veterinary hospitals, then rotate through four of the partner institutions. The first iteration of this class was offered Fall 2019 (the semester between my sabbatical sessions). I have further augmented this collaboration. Another local shelter (Pets Lifeline) is willing to be

the site for the initial class sessions, allowing access to their animals for this course. Current COVID concerns/protocols are prohibiting this class from being offered at the moment, but it will return once in-person instruction resumes.

### **E.** Evaluation Summary

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

Contributing to efforts for the SRJC Vet Tech program to be in compliance with current VMB regulations, and being as proactive as possible to ensure it remains so, maintains the purpose of my program. Adding the Intro to Careers Class has improved the effectiveness of teaching by improving the suitability of student cohorts. Students who are uncertain of their career goals are less motivated to perform well in a CTE class, and students who are just taking a class to explore an area of interest are unsuited for the core classes in the Vet Tech pathway. By shifting many of those students to the new Intro to Careers and Nursing Practicum classes, it has not only better prepared the neophyte students, but allowed for more appropriate and advanced approach to material in the core classes.

While not part of my sabbatical project as initially proposed, the efforts I contributed towards the development of the Vet Tech room on the Petaluma campus has created a far superior learning environment than ever existed for Vet Tech classes. A dedicated room with the appropriate equipment and ambiance of a veterinary clinic increases the scope of content that can be covered, efficiency in which material can be covered, nuance/quality in which hospital skills can be covered, and the setting greatly enhances the classroom culture.

Additionally, the outreach efforts to create and expand initial work experiences for my students will provided me with greater industry insight. Similarly, the larger number of veterinarians and registered technicians who are coming as weekly guest speakers has provided additional perspectives and networking opportunities. I can now better advise and teach students relevant and current skills for employment in local veterinary clinics.

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

Part 2 of this sabbatical project expands the scope of students served by the SRJC. Previously, students interested in the veterinary field had no option but to begin with the Veterinary Anatomy and Terminology course. The anatomy course is often too academically focused and challenging for their initial exploration goals. The introductory class I created is a more appropriate introduction to the field, especially for students recently (or concurrently) in high school.

Additionally, creating a class that is directly relevant for pre-veterinary students will provide guidance, structure, a sense of community, and a source of accurate information from individuals actually working in the student's chosen career field. All of these were previously lacking from the Santa Rosa Junior College.

3. How did this sabbatical leave benefit my department?

The Ag/NR Department is composed of 11 different disciplines and the Vet Tech program is completely independent in content, scope and mission. There are no cohesive department goals, so to most appropriately answer this question it is best to refer to Vet Tech Program goals and plans. All three aspects of this proposed project directly connect with the Veterinary Technician Program Learning Objectives as listed below:

- 1. Be qualified to sit for the Registered Veterinary Technician (RVT) exam in the State of California through the "Alternate Route" so long as students also complete their state mandated clinical experience hours;
- 2. Demonstrate competency in the necessary knowledge required for common job tasks in a small animal veterinary hospital context; and
- 3. Understand the directions from a veterinarian and relay information to clients regarding common diseases, protocols and procedures in a small animal veterinary hospital context.

I was able to implement appropriate changes positioning for compliance with impending state requirements. This process continues beyond this sabbatical, but remains essential for the program to meet goal 1. Creating an Introduction to Veterinary Careers Course provides a needed context to be better prepared students to meet goals 2 and 3. Creating field experience opportunities for students assists in meeting hours required to sit for the RVT exam and provides opportunity to practice goals 2 and 3. And lastly, creating a course specifically teaching exotic animal care broadens the students' acumen in meeting goal 2.

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

This project will support the SRJC Strategic Plan in the following ways:

#### SRJC Goal A: Support Student Success

Active learning, especially hands-on career training, has been proven to improve the performance of all students. Furthermore, these techniques have an even greater benefit for students from educationally disadvantaged backgrounds. This profoundly improves the effectiveness of hands-on instruction.

Creating closer connections with the local veterinary community and ensuring the validity of the Vet Tech program explicitly meets the objective to "provide relevant career and technical education that meets the needs of the region".

SRJC Goals B and C: Foster Learning and Academic Excellence and Serving Diverse Communities

Providing accessible insight to the pathways and realities of veterinary careers as well as creating structured opportunities to experience clinical veterinary practice improves the quality of this program and makes it more accessible to those not already within the industry. Such efforts decrease the barriers to beginning on this career path, increase motivation and retention of students, and facilitates students selecting career goals they can and will achieve.

#### F. Abstract for Board Report Summary

During his sabbatical, Dr. Dan Famini continued the viability of the SRJC Veterinary Technician program by researching and updating curriculum as needed in the changing regulatory landscape for Registered Veterinary Technician (RVT) licensure under which the program operates. Additionally, he expanded the scope of students served by creating several new courses. Neophyte students can now gain initial clinical experience in AnHlt122/L Animal Nursing Practicum in partnership with local veterinary clinics. The new AnHlt101 Introduction to Veterinary Careers course provides a welcoming first experience for students exploring the veterinary field, AnHlth 128 introduces students to the care of exotic pets, and the in-progress Pre-Veterinary major provides needed structure for students planning to become veterinarians.

# A. Applicant

Name: Sharien Hinton Department: Disability Resources Sabbatical Leave Dates: Spring 2020 Type of Leave: Independent Study

# **B.** Purpose of Leave

In order to better serve students with disabilities desiring transfer to a four-year college or university, I conducted an independent study of current regulations/laws, current and best practices, disability related documentation requirements as well various disability services offered at local universities.

# C. Leave Objectives

- 1. Conducted research pertaining to current disability law, current and best practices for a successful transition to a four-year university campus setting.
- 2. Due to COVID restrictions I consulted via telephone, email and Zoom with 11 CSU and/or UC campus Disability Service Offices.
- 3. Completed a written informational resource for Disability Services Faculty use when serving students interested in transfer options.

# **D.** Narrative

The requirements for how public colleges/universities serve students with disabilities and who is considered an "otherwise qualified" person with a disability date to the Rehabilitation Acts of 1974 &1978. The Americans with Disabilities Act of 1990 broadened and further codified the right to access education, structures, employment opportunities and services but provided vague language that left it to the courts to work out just who met the threshold of having a disability and the right to accommodations.

For nearly 30 years colleges, universities and testing agencies have required expensive and sometimes onerous disability documentation to access accommodations. The courts applied a narrow interpretation of who and what situations were covered by the ADA. In response, Congress authored The ADA Amendments Act of 2008, specifying that the protective and inclusive intent of the ADA is to be construed broadly and setting the stage for the eventual relaxing of disability documentation requirements; specifically when documentation demonstrates history of a condition(s) known to be chronic or permanent, such as learning disabilities. Over the last two years, The California Community Colleges' Chancellor's Office has radically changed disability verification requirements within our system reducing the

dependence on professional evaluation and relying more on "The Interactive Process." However, CSU's and UC's requirements or processes vary from one campus to another.

Objective 1:

Part of my Sabbatical focused on researching the current trend at local 4-year universities regarding documentation needed to determine eligibility for services relating primarily to learning disabilities (LD) and also other disabilities. Historically, to receive accommodations for a learning disability at the college level individuals were required to submit a comprehensive LD Evaluation, administered by a qualified professional that was completed within the last 3-5 years.

LD evaluations are time intensive and administrators are required to purchase and undergo extensive, specialized training in addition to most graduate level degree requirements. Typically provided free of charge to students enrolled in the K-12 and California Community College systems, an in-depth evaluation can cost thousands of dollars in the private sector and is usually not covered by health insurance.

Documentation requirements for disabilities other than LD historically required completion of a form or official letter from a treating and qualified professional (i.e. medical doctor or licensed psychologist). Currently, some Disability Centers have expanded the list of professionals who can verify the existence of a disability.

I first conducted research regarding recommended best practices and current issues within the field. Sources of information included Association on Higher Education and Disability, LD Online, the Office of Civil Rights, California Association of Post-Secondary Education and Disability, United States Department of Justice and others. I also reviewed websites of various 4-year campuses and testing agencies to determine how their requirements and how their processes, including appeals, are advertised or explained.

Objective 2:

Due to COVID restrictions I consulted via telephone, email and Zoom with eleven CSU/UC campus Disability Centers to as much as possible share the experience of the new student attempting to navigate an unfamiliar campus and access services. My primary focus was universities popular with our transfer students and included Universities of California at Davis, San Francisco, Berkeley and Santa Cruz. California State Universities contacted were Sonoma, Chico, San Francisco, San Jose, East Bay, Humboldt and Monterey. I requested the following and other information dependent on the results of my research:

• Best suggestions for transfer success specific to the university/college or Disability Resource Center in question. Typically, colleges and universities will have specific suggestions for success after transfer specific for students with disabilities. Or, recommendations for pitfalls to avoid.

- Disability documentation requirements: Some Disability Center websites are very informative, provide forms and contact information. Others simply say schedule an appointment and provide very little up-front information. It is important for students, (specifically for those travelling a distance) to have needed documentation available at the first appointment to expedite the process and access any registration assistance.
- Disability Center supports: Basically, what can the student expect from the campus Disability Center? Examples of that I will be seeking are the following: What are the processes for informing professors of authorized accommodations? What technology is used and is there Assistive Technology training? What are the facilities for tests? Is there specialized academic counseling. What does the college offer students when their disability documentation does not meet verification requirements?
- Campus supports: Does the campus offer tutoring, what classes and how are the tutors trained? Are there math and English classes/assistance? Are there study helps? Is there a mental health support center?
- Various special procedures such as Course Substitution, Alterations and/or Entrance Requirements Waivers: Are there processes in place to accommodate the student who due to their disability can complete every requirement but perhaps one for a class or a degree to determine if an alteration is appropriate?
- Personnel and Staffing: Are students served by specific disability experts or generalists? What is the ratio of staff to students? How often are students able to see a staff member?

Objective 3:

At the completion of my research and campus consultations, I compiled my findings into a written resource including the attached Research Summary, Transfer Guides for 11 campuses which are available to my faculty colleagues and my department. The intention was to create a resource providing information and the best possible preparation for students with disabilities seeking to further their education on a four-year or more campus.

# **E.** Evaluation Summary

1. Describe how the projects benefits your department, teaching assignment and students.

My project enables every faculty member in my department to more effectively discuss transfer options with interested students on their caseload. This project also increases my effectiveness in the new role of DSP&S Counselor in addition to Disability Specialist. In general, students are better served by faculty who can access specific information regarding transfer opportunities and the unique disability related services offered across university campuses.

2. How does our project address the SRJC Strategic Plan and/or your department's educational plan?

My Sabbatical addresses SRJC's Strategic Plan by fostering excellence in learning, increasing student goal completion, preparing students for transfer and meeting the unique needs of a diverse student population. This project also speaks to Disability Resources commitment to assist students in reaching their personal, educational and vocational goals.

# F. Abstract

During her Spring 2020 semester sabbatical, Sharien Hinton researched best practices and current disability law pertaining to transfer to a four-year university setting for Students with Disabilities. She consulted with eleven university campus Disability Services Offices with purposes of verifying disability documentation requirements and services offered. This information was made available in a written resource to DRD faculty for use in serving students with disabilities who are pursuing transfer to a four-year university.

# A. Applicant

Name: Lori Kuwabara

Department: English

Type of Leave: Independent Study, Project

Leave Dates: Spring 2020

### **B.** Purpose of Leave

I studied the rich and varied topic of happiness, as an area of new curriculum possibilities for English pathway courses. After finishing my exploration of readings, films, theories, seminars, institutes, and projects on this topic, I revised my English courses and created a teaching-learning guide for my department.

### **C. Objectives**

Objective #1: Discover the current scholarship, trends, thinking, and practices of happiness as it pertains to a social justice curriculum.

I completed this objective by reading books, researching conferences and institutes, and taking an online course called The Science of Well-Being, taught by Dr. Laurie Santos of Yale

University. With this new knowledge, I have found ways to add renewed hope, positive thinking, and mindfulness to studying social justice.

Objective #2: Revise my English courses by incorporating my new knowledge of happiness through readings, classroom activities, and assignments.

I completed this objective by revising my English 1A courses for Fall 2020. I'm using a new reader focused on the study of happiness, called *Pursuing Happiness*. Along with online discussions, happiness tests, surveys, and "Happiness Homework," I've added many new assignments. I'm only teaching English 1A this semester. English 5 will have to wait until next year for its happiness makeover.

Objective #3: Create a teaching-learning guide on happiness primarily for the English Department.

I completed this objective by creating a bibliography of books, TEDtalks, and other resources for my department.

### **D.** Narrative

Objective #1: Discover the current scholarship, trends, thinking, and practices of happiness as it pertains to a social justice curriculum. Starting in January 2020, I dove into the pile of books on happiness I had been collecting in the past year. I also read many articles from newspapers and magazines and discovered various happiness conferences, institutes, workshops, and seminars. I augmented my own yoga practice with a series called 30 Days of Happiness Yoga online and started meditating every day. I also tried several "sound baths" that are purported to aid in health, mind-clearing, and healing. I made plans to go to the annual World Happiness Summit in Miami, Florida. All of this helped me discover the truth of the Dalai Lama's words: "The purpose of our lives is to be happy" as the world has become openly happiness hungry in the past 20 years.

In March 2020, I went to an exhibition at the DeYoung Museum in San Francisco called "Soul of a Nation: Art in the Age of Black Power" focusing on African American art, 1963 - 1983. Here I found the art by the Coalition of Black Revolutionary Artists (COBRA) and AfriCOBRA in Chicago, that focused on "the power of visual and verbal language to foster self empowerment." This encapsulated my thinking for my sabbatical project. Fighting for social justice isn't only about tearing down oppressive systems and fighting the negative forces from without; it's also about celebrating and raising the positive, life-affirming energy from within. Both positivenegative and outside-inside always exist. Our relationship to them at any given time is up to us. As one artist in the exhibit, Alma Thomas, said in 1972: "Through color, I have sought to concentrate on beauty and happiness, rather than on man's inhumanity to man." This thinking actually lies at the root of positive psychology: instead of just focusing on curing mental illness and diagnosing neuroses, shift to helping people live happier, more fulfilling lives.

A week later, my plans to attend the World Happiness Summit in Miami were canceled when the COVID-19 shelter-in-place order began. Fortunately, I found two other opportunities online. The first was a five-day Buddhist conference, "In the Footsteps of Thich Nhat Hanh". Along with the usual dharma talks and meditations, it offered a session by Dr. Larry Ward called "On America's Racial Karma," which attempted to openly address racism from a Buddhist perspective. (It was, to be honest, underwhelming, but at least the conference made an effort.) The second opportunity was a ten-week course called The Science of Well-Being – which was nothing short of amazing. Coursera billed it as "the most popular course ever at Yale." Professor Laurie Santos, a leading researcher in the field of positive psychology, provided an extensive overview of the history and research of the field. (She also recently launched an ongoing podcast called The Happiness Lab.) The course turned out to be the absolute perfect resource for my sabbatical project, above and beyond a weekend conference.

Objective #2: Revise my English courses by incorporating my new knowledge of happiness through readings, classroom activities, and assignments.

I used my exploration above to revamp my English courses this semester. I had more than enough sources and ideas. My course title is "HAPPY?" I'm using an excellent reader called *Pursuing Happiness*, which includes pieces from spiritual texts and modern researchers, like Martin Seligman, Daniel Gilbert, Sonja Lyubomirsky, and Mihaly Csikszentmihalyi. I have "happiness homework" every week, based on the exercises I discovered in my summer course The Science of Well-Being. So far, my students are engaged with the many surveys, theories, research, differing opinions, and methods on happiness. They show understanding of the complexities of happiness, all the while learning the academic reading, writing, research, and critical thinking skills of English 1A. Most students have voiced gratitude for gaining these happiness skills, learning about themselves, and feeling more balanced and stronger, which is especially important now in these increasingly unpredictable, stressful times.

Objective #3: Create a teaching-learning guide on happiness primarily for the English Department. I kept records of my happiness exploration and created a list of resources for anyone wanting to infuse a little happiness into their courses.

# **E.** Evaluation Summary

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

I completely revised my courses, so I'm fresh and enthusiastic about what I'm teaching. I'm aware of the complexities of happiness and well-being overall, which makes me more effective, engaging, and compassionate as an instructor. Attitude, openness, and gratitude make all the difference in the classroom. What I'm teaching now benefits every student in my class since happiness goes beyond any interest, field, plan, or goal.

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

I revised my English 1A courses to have a theme of happiness. My course title is "HAPPY?" I'm using an excellent reader called *Pursuing Happiness*. I have "happiness homework" every week, based on the exercises I experienced in my summer course The Science of Well-Being. So far, my students are engaged with the many surveys, theories, research, differing opinions, and methods on how to be happy. They show understanding of the complexities of happiness, all the while learning the academic reading, writing, research, and critical thinking skills of English 1A. Many students have voiced gratitude for gaining these happiness skills, learning about themselves, and feeling more balanced, happier, and stronger overall, which is especially important now in these increasingly unpredictable, stressful times.

3. How did this sabbatical leave benefit my department?

I have compiled a resource guide of books, videos and other sources for my department.

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

Studying happiness in English courses aligns with the core values outlined in SRJC's mission statement: to "passionately cultivate learning through the creative, intellectual, . . . social, emotional, aesthetic and ethical development of our diverse community"; to "promote personal and professional growth and cultivate joy at work and in lifelong learning"; and to

"help students develop a vision for their lives." My sabbatical project definitely contributes to furthering these core values.

# F. Abstract for Board Report Summary

Lori Kuwabara conducted an individual study on the scholarship of happiness through a variety of books, videos, and articles as well as taking the online course The Science of Well-Being with a Yale professor. From this study, she compiled a list of resources for SRJC colleagues and revised her English courses to incorporate and spread her many discoveries of happiness and well-being.

### A. Applicant

Name: Donald Laird

Department: Computer Studies

Type of Leave: Independent Study

Leave Dates: Fall 2020

### **B.** Purpose of Leave

The purpose of my leave was to explore how California Community Colleges are including drone education into their curriculum, including holding discussions with instructors in the discipline. This resulted in the update of the SRJC drone program, as well as a PDA presentation.

### **C. Objectives**

- 1. Compiled data on departments offering drone-related curriculum.
- 2. Met online with discipline instructors and program coordinators.
- 3. Replaced facilities tours with additional research, conference attendance, and presentations, due to Covid considerations.
- 4. Present a session at spring 2021 PDA.

# **D.** Narrative

In order to compile data on the drone-related courses and programs offered throughout California, I read the catalogs of all 115 California community colleges, looking for any courses which utilized drones in their curriculum. In addition, I researched the catalogs of all 21 CSU campuses and 9 UC campuses. I located a total of 37 California community colleges offering drone-related courses. At these colleges, I found 109 different courses being offered in 51 different departments. In addition, I identified 12 community colleges which offer drone-related programs – 16 certificates and 7 majors in all.

Due to Covid shutdowns, I was unable to visit any of the other schools in person. I was, however, able to meet via Zoom with instructors of drone-related courses. In fact, rather than the five meetings I planned in my sabbatical proposal, I was able to meet virtually with instructors from 11 different community colleges. See the included meeting notes for details of these meetings.

I submitted a proposal for a spring 2021 PDA session on "Including Drone Technology in Your Discipline", based on information I found in my sabbatical research. The proposal was accepted, and I will be offering it on PDA day.

In addition to my planned activities, I took advantage of my sabbatical to complete additional activities:

- Acted as member of the State Academic Senate Career & Technical Education Leadership Committee
- Was a member of the Bay Region Community College Consortium ICT-DM Community of Practice
- Became a member of the FAA UAS-CTI (Unmanned Aerial System Collegiate Training Initiative) Planning Committee
- Attended the virtual Adobe MAX conference on October 20-22, where I attended 27 different sessions on the latest features and uses of Adobe applications. Based on some of what I learned at the conference, I will be presenting a second session at Spring 2021 PDA Day New Features in Adobe Photoshop.
- Presented on drone technology at a virtual meeting of the Oakley Rotary Club.
- Guest lectured for the City College of San Francisco Photography 102D class. The topics presented were "Documenting Fire Recovery with a Drone" and "Part 107 Speed Run."
- Recorded a session on "Starting a Drone Program at Your School" for the 2021 WASTC Winter Conference.
- Created a flyer on drone rights and responsibilities for the Rohnert Park Public Safety Department to distribute to residents.
- Used my catalog research to compile information on other topics of interest to my department:
  - Examples of courses similar to our CS 5 Computer Literacy course, which is about to undergo a complete overhaul
  - Examples of courses similar to those we offer, which were able to acquire C-ID identification
  - Examples of courses in areas our department may want to consider expansion

# **E. Evaluation Summary**

1. How did this sabbatical leave enhance my work performance at the college? Through the interviews with drone-related instructors at other community colleges, I was able to identify several ideas for new projects, assignments, and lab activities. These suggestions include:

- New flight drills for use in lab, in order for students to increase their piloting proficiency, such as using traffic cones, dowels, and fabric flags to make slalom course markers.
- Having students create 3d point cloud models of campus buildings via programmed drone flights.

- Having students use drone photography to take panorama images of campus locations.
- 2. How did this sabbatical leave benefit students in my discipline?

By improving the assignments, projects, and lab activities in my drone courses, I will produce students with more flight and flight planning experience. This will better prepare them for employment opportunities in the field.

3. How did this sabbatical leave benefit my department?

I was able to acquire ideas for possible collaborations with other departments, and even other schools, in order to pursue the development of cross-curriculum certificates and/or majors. This can help identify students completing drone-related pathways.

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

By increasing student success through improved class experience and identified skill pathways.

# F. Abstract for Board Report Summary

Donald Laird investigated the catalogs of the public colleges in California and compiled lists of the drone-related courses and programs they offer. He met online with drone instructors from 11 community colleges in order to discuss their courses and programs. He also gave presentations to a service club and a photography class at City College of San Francisco. During the sabbatical period, he also served on the FAA Unmanned Aerial System Collegiate Training Initiative Planning committee and attended the Adobe MAX conference.

### A. Applicant

Name: Amy Merkel

Department: Counseling

Type of Leave: Independent Study

Leave Dates: Spring 2020

### **B.** Purpose of Leave

I produced new and updated materials for teaching Counseling 53, College Survival, in the online format. I have been teaching online for several years and was able to enhance my knowledge by engaging in online trainings. I created new course materials to make the learning environment more engaging for students.

# C. Objectives

- 1. I participated in 3 online trainings to enhance my online teaching skills.
- 2. I developed new course materials to be used in Counseling 53.
- 3. Due to Covid-19, I was unable to utilize the Center for Excellence in Teaching and Learning in the Doyle Library to create new videos using the resources available. I did receive approval from the Sabbatical Committee, AFA and the VP of Academic Affairs to create videos at home.

#### **D.** Narrative

The world of distance education has drastically changed since I started teaching in the online format eight years ago. Besides new technology and techniques being created to engage students, SRJC has utilized three different course management systems (CMS), CATE, Moodle and Canvas. Each new system took time to convert my classes and master the unique ways of teaching through that CMS. Although I know the basics of Canvas, there is a lot more I could be doing within the CMS to connect with students and have students connect with one another.

At the end of every semester, I revise my courses to add new content, assignments and videos to ensure my students are getting the best experience. Even though I have revised the online content to keep the class current, I know there are many new tools and methods that will make online learning more engaging for the students who enroll in the class. The sabbatical leave gave me the opportunity to research and develop new activities and ways of presenting information. Having the time to devote to this project was invaluable and allowed me to create a course that is more engaging for the distance education learner.

Objective 1: In order to gain additional strategies for teaching online I participated in trainings through online venues. I completed the class *Introduction to Course Design* which was a four week course through @One that provided innovative ways to create a course in Canvas. Through the SRJC Distance Education Office, I completed a training on PlayPosit and utilizing Groups in Canvas. Lastly, I participated in two online trainings to learn about VoiceThread and how to integrate it into Canvas.

Objective 2: After I participated in the online trainings in Objective 1, I was able to enhance my online teaching strategies and developed new course materials for Counseling 53.

Objective 3: The Center for Excellence in Teaching and Learning provides SRJC faculty with the opportunity to use state of the art equipment to create videos, use a green screen and a learning glass. I was unable to use these resources to create new videos for Counseling 53 due to the campus closure. I did however, receive permission to create videos at home due to this unforeseen circumstance. I created new videos using Adobe Spark, Screen-Cast-O-Matic and YouTube to enhance the materials in Counseling 53.

# **E. Evaluation Summary**

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

Having the time to explore and learn how to use new tools to enhance the online classroom has enabled me to create an environment that is conducive to all learning styles. Every single module and page in Counseling 53 was changed in some way and several new assignments were created. Each change was made to better connect students to me as the instructor, their classmates and the college community.

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

Students in my discipline will benefit from the objectives of this sabbatical because they will be enrolled in an online class that is utilizing up to date technology and online teaching methods that will help them to stay engaged. The knowledge that I gained will also be utilized in other online courses I teach. As the Transfer Center Director, I also incorporated what I learned on my sabbatical into the Transfer Center website. After returning from my sabbatical I created a Transfer Resource Library through Canvas to assist students applying to four-year universities.

3. How did this sabbatical leave benefit my department?

Now that everyone in my department is teaching online in one format or another, I have already shared the knowledge I gained from my sabbatical. I sent an email to my colleagues in June with a tip sheet and resources to help them in creating their online class. After receiving the email,

several colleagues reached out to me for assistance. I will be giving a formal presentation to my department later this semester where I will share the before and after of Counseling 53 and provide detailed information on the resources I used to enhance the class.

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

My sabbatical project aligns with Goal B of the Strategic Plan by engaging students in learnercentered environments and creating responsive instructional practices that increase the learning and success of our diverse students.

# F. Abstract for Board Report Summary

Amy Merkel produced new and updated materials for teaching Counseling 53, College Survival, in the online format. She participated in online trainings to enhance her skill level in developing course content for online teaching. She created new course materials to make the learning environment more engaging for students. She recorded videos to incorporate into the course. A presentation will be given to the Counseling department to provide an overview of the changes made and the resources used to enhance the class.

# A. Applicant

Name: Merilark Padgett-Johnson

Department: Agriculture & Natural Resources

Type of Leave: Independent Study

Leave Dates: Fall 2020

### **B.** Purpose of Leave

Purpose of sabbatical leave was to create full course laboratory manuals for four of the Viticulture classes that have a laboratory component. This includes creating new curriculum, updating and improving existing curriculum for courses within the Viticulture and Pest Control Advisor Preparedness Programs. Having a complete laboratory manual for these classes at the beginning of the semester will promote and support students' success, as they can access all the hands-on exercises for each topic, and familiarize themselves with the course expectations.

#### **C. Objectives**

- 1. I created weekly Topic Content Files with accompanying Laboratory Manual and Field and Classroom Exercise Guides for Vit 51 class "Viticulture: Fall Practices".
- 2. I created weekly Topic Content Files with accompanying Laboratory Manual and Field and Classroom Exercise Guides for it 52 class "Viticulture: Spring Practices".
- 3. I created weekly Topic Content Files with accompanying Laboratory Manual and Field and Classroom Exercise Guides s for Vit 54 class "Viticulture: Summer Practices".
- 4. I created weekly Topic Content Files with accompanying Laboratory Manual and Field and Classroom Exercise Guides for Vit 70 class "Vineyard Pest & Disease Management".

# **D.** Narrative

Objective 1: Vit 51 class "Viticulture: Fall Practices" is a 17-week lecture/lab course. I researched and developed topics for each of the 17 weeks, resulting in updated curriculum, new curriculum, activities and exercises appropriate to Fall and early Winter viticultural practices. These topics include:

- 1. Canopy Assessment
- 2. Cultivars, Rootstocks, Clones

- 3. Harvest Protocol, Crop Projection, Refractometer and pH Measurements
- 4. Post-Harvest Practices: Irrigation, Fertilization, Pest Control
- 5. Vineyard Winterization: Cover Crops and Erosion Control
- 6. Winter Weed Control
- 7. Hedgerows and Farm Diversity
- 8. Sustainability Protocol and Certification
- 9. Organic Protocol and Certification
- 10. Integrated Pest Management Protocol
- 11. Vineyard Budgeting Part 1
- 12. Vineyard Budgeting Part 2
- 13. Grape Contracts and Crop Insurance
- 14. Pesticide Use Compliance, Pesticide Use Reporting and Licensing
- 15. Vineyard Databases and Record Keeping
- 16. Soil Health and Fertility Planning
- 17. Pruning and Pruning Safety

Objective 2: Vit 52 class "Viticulture: Spring Practices" is resulting in a 17-week lecture/lab course. I researched and developed topics for each of the 17 weeks, resulting in updated curriculum, new curriculum, activities and exercises appropriate to late Winter and Spring viticultural practices. These topics include:

- 1. Vine Stages of Growth Eichorn-Lorenz Numbers
- 2. Pruning Shear Safety, Spur and Cane Pruning
- 3. Frost Protection
- 4. Vineyard Mechanization
- 5. Weed Identification
- 6. Pesticide Labels, Interpretation, Herbicide Spray Application
- 7. Vine Propagation and Grafting
- 8. Determination of percent Bud Burst
- 9. Vineyard Soil Health Testing and Fertilization
- 10. Vineyard Development and Re-plant Compliance with Sonoma County
- 11. Components of Pest & Disease Management, Monitoring Bluegreen Sharpshooters
- 12. Irrigation System Monitoring and Maintenance
- 13. Bud Fruitfulness, Cluster Counts
- 14. Vine Mineral Nutrition, Petiole and Leaf Blade Testing
- 15. Vine Training, Shoot Thinning and Suckering
- 16. Cultivar, Rootstock and Vitis species Identification
- 17. Fruit Quality Assurance Planning

Objective 3: Vit 54 class "Viticulture: Summer Practices" is a 6-week lecture/lab course. I researched and developed topics for each of the 6 weeks, resulting in updated curriculum, new curriculum, activities and exercises appropriate to Summer viticultural practices. These topics include:

- 1. Summer Practices that Affect Fruit Quality
- 2. Canopy and Crop Load Assessments
- 3. Canopy Management Practices

- 4. Vine Water Status, Measuring Evapo-Transpiration, Use of Leaf Pressure Chamber and Porometer
- 5. Scouting for Pests and Diseases
- 6. Field Worker Safety and Health Protection / Cal OSHA

Objective 4: Vit 70 class "Vineyard Pest & Disease Management" is a 17-week lecture/lab course. I researched and developed topics for each of the 17 weeks, resulting in updated curriculum, new curriculum, activities and exercises that focus on pest and disease identification and management.

These topics include:

- 1. Integrated Pest and Disease Management, Organic, Sustainable and Biodynamic Farming
- 2. Vineyard Growth Cycle, Periods of Vine Susceptibility, Diagnostic Techniques
- 3. Phylloxera, Soil-borne Diseases: Crown Gall, Oak Root Fungus, Verticillium Wilt
- 4. Fungal Diseases: Powdery Mildew, *Botrytis* Bunch Rot
- 5. Reading and Interpreting Pesticide Labels
- 6. Modeling for Disease Risk Management, FRAC codes, Seasonal Powdery Mildew Plan
- 7. Fungal Diseases: Eutypa lata, Phomopsis, Measles, Trunk Diseases
- 8. Pierce's Disease: Xylella fastidiosa and its Vectors
- 9. Virus Diseases
- 10. Nematodes
- 11. Mites Acari
- 12. Weeds
- 13. Caterpillars and Moths Lepidoptera
- 14. Leafhoppers and Mealybugs Hemiptera
- 15. Modeling for Pest Risk Management, Degree-Days, Biofix, IRAC codes, Seasonal Insecticide Spray Plan
- 16. Vertebrate Pests
- 17. Natural Enemies / Beneficial Organisms for Disease & Pest Control

# **E. Evaluation Summary**

- 1. How did this sabbatical leave enhance my work performance at the college? Having current and expanded curriculum for the four Viticulture courses has improved my effectiveness and work performance at SRJC. I incorporated the latest industry perspectives and scientific research into the lectures and Laboratory Manual/Field Exercises.
- 2. How did this sabbatical leave benefit students in my discipline?
- Students in the Viticulture and Pest Control Advisor Preparedness Certificate Programs benefit from learning and having access to timely and relevant information that is expected of them on the job, seeking employment in the wine grape industry, or qualifying to take the California Department of Pesticide (DPR) Pest Control Advisor (PCA) Exam. The students can practice and sharpen their skills so that they are competent and confident on the job, applying for a job, or taking the PCA exam to obtain their PCA license.

- 3. How did this sabbatical leave benefit my department? Updated curriculum brings currency and vitality to the Viticulture and Pest Control Advisor Preparedness Programs. This benefits the Agriculture/Natural Resources Department by improving the reputation of these Programs. This in turn improves enrollment.
- How did this sabbatical leave address the SRJC Strategic Plan and/or your department's educational plan?
  Updated and revitalized curriculum results in keener student engagement, enriched learning experiences and better prepared students entering the workplace.

# F. Abstract for Board Report Summary

Merilark Padgett-Johnson updated and improved the Viticulture and Pest Control Advisor Preparedness Certificates curriculum by creating expanded topic outlines, content and Laboratory Manual and Field Exercises to be used for Vit 51, Vit 52, Vit 54 and Vit 70 courses. The updated curriculum and Laboratory Manual and Field Exercises provide relevant and timely hands-on, real world exercises for the students in these two Programs.

### A. Applicant:

Name: Dr. Scott Rosen

Department: Computer Studies

Type of Leave: Independent Study

Sabbatical Leave Dates: Spring 2020

### **B.** Purpose of Leave:

In order to better serve students, I conducted an independent study of best practices in educational video production and technology, to improve my knowledge and skills and abilities, including accessibility, video editing software (Camtasia) and hardware.

As a result of my study, I created nine multimodal interactive video tutorials (guided video tutorials with embedded quizzing and other learning widgets). These broadcast quality tutorials will adhere to current accessibility standards are between 20 to 45 minutes in length each.

Using these guided video tutorials, students will master basic and intermediate technology skills and become fluent in word processing (Word), presentation software (PowerPoint) and spreadsheet (Excel) as well as document management and saving documents in Portable Document Format (PDF).

#### C. Leave Objectives:

Conducted research pertaining to current best practices in educational video production and accessibility standards improved my knowledge skills, and abilities to:

- 1. Mastered video editing software (Camtasia) by taking online classes, watching training videos as well as reading articles and books, as measured by my ability to produce professional quality and accessible software training videos.
- 2. Created nine broadcast quality interactive video tutorials, to train students to use academic and industry standard software (Word, PowerPoint, Excel, PDF). Tutorials are between 20 and 45 minutes in length and enable students to master basic and intermediate technology skills required for fluency in these software programs.
- 3. Shared videos with my department colleagues. These videos are especially valuable teaching tools to myself and department colleagues who teach Computer Literacy "CS 5" and other classes that use the Microsoft suite of office applications.
- 4. Created a presentation for PDA workshop. Which I will be presenting at spring 2021 PDA Day. This presentation will allow me to provide my colleagues with additional training above and beyond the scope of the "in-person" lecture as well as providing

additional hands on training in the other office applications (Word, Excel, as well as document management and saving documents in Portable Document Format (PDF).

### **D.** Narrative

In order to better serve students, I conducted an independent study of best practices in educational video production and technology, to improve my knowledge and skills and abilities, including accessibility, video editing software (Camtasia) and hardware (objective C1).

I couldn't have realized at the time I created my sabbatical proposal just how apropos my project would become. Due to the Covid 19 pandemic, learning at our institution has gone entirely online. Video lends itself perfectly to online education because of the ease of electronic delivery. The learning videos created in my project can be delivered over the Web and are not dependent on time for delivery.

No travel was necessary for my independent study, I primarily relied upon online resources including; TechSmith training resources for the Camtasia software used to edit the videos. <u>Produce Like a Pro</u>, an award winning online academy provided the necessary training in digital audio for narration and original music. I also studied <u>Practical Photoshop 2020</u> (Laird) for graphics and illustrations, and <u>How to Create Video that Doesn't Suck</u> (Stockman) was a primary source for video and cinematography techniques. These resources are outlined in the attached appendix.

As a result of my study, I created nine multimodal interactive video tutorials with embedded quizzing and other learning widgets (objective C2). These broadcast quality tutorials adhere to current accessibility standards and are between 20 to 45 minutes in length. Using these guided video tutorials, students will master basic and intermediate technology skills and become fluent in word processing (Word), presentation software (PowerPoint) and spreadsheet (Excel) as well as document management as well as saving documents in Portable Document Format (PDF). These videos are outlined in the attached appendix.

Because of my work on this sabbatical project I was able to create a presentation for submission to the Professional Development Committee for spring 2021 PDA Day workshop (objective C4) so that I may be able to help my colleagues with additional training above and beyond the scope of the "in-person" lecture. This presentation is outlined in the appendix. Additionally, these video tutorials enable myself, and every faculty member in my department; Computer Literacy (CS 5) Instructors in particular, to more efficiently and effectively teach the standard office applications to our students (objective C3). Outlined in the attached appendix.

#### **E.** Evaluation Summary

These video tutorials enable every faculty member in my department to more effectively teach the standard office applications to their students. This project has also increased my effectiveness as a computer technology instructor by providing the knowledge, skills and abilities to provide students with an additional rich and accessible learning resource through interactive video.

My sabbatical addressed SRJC's Strategic Plan by fostering excellence in learning, increasing student goal completion, preparing students with the technological knowledge, skills and abilities to use academic and industry standard software. (Word, PowerPoint, Excel, PDF), that meet the unique needs of a diverse student population.

### F. Abstract for Board Proposal Summary

During his sabbatical, Dr. Scott Rosen conducted an independent study of best practices in educational video production, to improve his knowledge and skills and abilities, including accessibility, video editing software (Camtasia) and hardware. He created nine multimodal interactive accessible video tutorials (guided video tutorials with embedded quizzing and other learning widgets). In order to better serve students in learning academic and industry standard software. (Word, PowerPoint, Excel, PDF, Windows) Dr. Rosen made these videos available to CS and BOT instructors and submitted a presentation for a PDA day workshop.

# A. Applicant

Name: Nicole Slovak

Department: Behavioral Sciences

Type of Leave: Project

Leave Dates: Spring 2020 and Fall 2020

# **B.** Purpose of Leave

Over the course of my Sabbatical Leave, I conducted archival and museum-based research on ancient burial collections from the site of Ancón, Peru. Alongside this research, I produced a transcribed version of an early twentieth century archival document by the archaeologist, Max Uhle, in which I embedded associated digital images of artifacts. Finally, I completed a partial draft of an academic article summarizing aspects of my research for publication in *Latin American Antiquity*.\* \*\*

\**The above statement represents a final revised "Purpose of Leave" that was approved by the Sabbatical Committee 10/26/20. The original abstract read as follows:* During the first phase of my Sabbatical Leave, I will conduct archival and museum-based research on ancient burial collections from the archaeological site of Ancón, Peru.

\*\**An earlier revision that was submitted and approved by the Sabbatical Committee on 3/17/20 in response to the early days of the pandemic read as follows:* Over the course of my Sabbatical Leave, I will conduct archival and museum-based research on ancient burial collections from the archaeological site of Ancón, Peru. Alongside this research, I will complete a manuscript summarizing aspects of my research for publication in an academic journal or book.

# **C. Objectives**

- 1. I have reviewed two archaeological research collections from Ancón, Peru virtually. Please see Narrative section: Objective 1 below.\* \*\*
  - a. *\*The original Objective 1 read as follows:* Visit at least two museums that house archaeological research collections from Ancón, Peru.
  - b. \*\*An earlier, accepted revision of Objective 1 read as follows: Given the Covid-19 outbreak, I ask that the committee allow me to review at least one or more collections virtually, rather than in-person. Please see Narrative section: Objective 1 below.
- 2. Virtually conducted archival, artefactual, and/or osteological research on said museums' Ancón collections.\* \*\*

- a. *\*The original Objective 2 read as follows:* Conduct archival, artefactual, and/or osteological research on said museums' Ancón collections.
- b. \*\**An earlier, accepted revision of Objective 2 read as follows:* If review of collections has to be virtual rather than in person, there may be minor changes to my methodology. Please see Narrative section: Objective 2 below.
- **3.** Integrated the results of the museum-based research into my on-going study of Ancón mortuary practices.
- 4. Partially completed an article for eventual publication in *Latin American Antiquity* or similar academic journal.\* \*\*
  - a. *\*The original Object 4 read as follows:* Complete a manuscript on my research and findings for publication in either an academic journal or book.
  - b. \*\**An earlier, accepted revision of Objective 4 read as follows:* Given the outbreak, I may need to adjust the timeline for my publication. Please see Narrative section: Objective 4 below.
- 5. Completed a digital transcription of an early twentieth century archival document by the archaeologist, Max Uhle, now in the possession of the Phoebe A. Hearst Museum of Anthropology. I embedded digital images of artifacts alongside Uhle's descriptions of said objects in the digital transcription.\*
  - a. \*This was an additional objective that was added to a revised copy of my sabbatical report and approved by the Committee on 10/26/20.

# **D.** Narrative

Background: The archaeological site of Ancón is located approximately 40 km north of Lima on Peru's Central Coast. The site is exceptional in three ways: First, preservation of archaeological materials—including human remains—is remarkable. Second, Ancón is one of only a handful of sites in the Andes that has been occupied nearly continuously from preceramic times through the Spanish Conquest in the mid-sixteenth century. As such, it allows scholars an opportunity to study long-term cultural change in the pre-Hispanic Andes. Third, the site has been excavated extensively, resulting in the discovery of more than three thousand human burials and more than ten thousand artifacts—many of which have never been studied scientifically. My primary sabbatical goal was to identify and analyze understudied museum collections from Ancón in order to better understand the site's role in Andean prehistory and to tell the stories of Ancón's ancient inhabitants.

Objective 1: Given the COVID-19 pandemic, my initial plans to travel to different museums and review archaeological and osteological collections first-hand were scuttled. As noted in my final revision to Objective 1, I reviewed archaeological research collections from Ancón, Peru virtually. The two major Ancón collections that I reviewed were the Phoebe A. Hearst Museum of Anthropology's Max Uhle collection and the Field Museum of Chicago's George Dorsey collection. Fortunately, I was able to review and examine hundreds of artifacts, including ceramics and textiles, in both of these assemblages.

Objective 2: I primarily conducted archival and artefactual research on the Phoebe A. Hearst Museum of Anthropology's Max Uhle collection and the Field Museum of Chicago's George Dorsey collection. I was not able to view osteological materials in great detail because of ethical restrictions surrounding the virtual representation of human remains.

The first step in researching both the Hearst and the Field Museums' collections was to conduct a comprehensive review of unpublished archaeological field notes, photographs, and/or drawings related to the assemblages in the museums' digital archive collections. I then completed an exhaustive literature review of published works related to the aforementioned collections. Once the archival and lit reviews were completed, I reviewed each artifact in the collection, noting artifact style, cultural and osteological associations, and provenience. I assigned objects to established time periods whenever possible. My goal was to group together and analyze artifacts (and mummies, if possible) from a single burial context, followed by a comparative analysis of burial contexts to each other.

Objective 3: I integrated the results of my analyses on the Hearst and Field Museum's collections into my on-going study of Ancón mortuary practices. I put much of my efforts into restoring contextual information to those human burials for whom chronological and cultural data had been lost, as well as refining an understanding of funerary practices over time on Peru's Central Coast.

Objective 4: Following my analysis, I completed the first two-thirds of a manuscript based on the results of my research for publication. I intend to finish the manuscript in the coming months and submit it to *Latin American Antiquity*. My initial goal was to have completed this manuscript by the end of the sabbatical period; however, as I noted in my revised sabbatical proposal dated 10/26/2020, the challenges associated with Covid-19 made such a task impossible.

Objective 5: I completed a digital transcription of an early twentieth century, fifty-nine page archival document by the archaeologist, Max Uhle, now in the possession of the Phoebe A. Hearst Museum of Anthropology. Using digital photos that I had taken of the document during a pre-Covid visit to the museum as well as the Hearst's own on-line photographic collection, I spent multiple weeks digitally transcribing Uhle's text and embedding hundreds of digital images alongside it. Prior to this effort, artifacts and their contextual description remained separate from one another. By digitizing Uhle's notes and embedding artifact images into his written account, I and future researchers can reimagine and reconstruct grave lots much more accurately and efficiently. I intend to use this document as the beginnings of a future monograph on Uhle's research at Ancón in the early twentieth century.

#### **E.** Evaluation Summary

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

The information gathered during my project has enhanced my role as an Anthropology Instructor because I intend to integrate research-driven data that I collected into my Archaeology, Forensic Anthropology, and Biological Anthropology courses.

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

Students will benefit directly from the integration of current and relevant anthropological information and methodology in their lectures and class-room activities. They will also be exposed to a concrete example of how scientific Anthropological research is carried out in the "real-world," from research design to implementation to analysis and publication of results.

3. How did this sabbatical leave benefit my department?

My project benefits my department because it contributes to the overarching goal of Behavioral Sciences, which is to study and understand human behavior and the links between human biology and culture across time and space.

4. How will the objectives of this sabbatical leave advance the college's mission as put forth in the District's Strategic Plan?

My sabbatical addresses SRJC's Strategic Plan because it reflects the college's commitment to professional growth and life-long learning and allowed me the opportunity to participate in diverse local and global communities.

#### F. Abstract for Board Report Summary

During her Spring 2020 and Fall 2020 Sabbatical Project, Nicole Slovak conducted virtual archival and museum-based research on mortuary collections from the archaeological site of Ancón, Peru. She conducted archaeological analyses of the Phoebe A. Hearst's Museum of Anthropology and the Field Museum's cultural and osteological materials. The results of her study were integrated into Nicole's on-going analysis of burial practices at Ancón, and are in the process of being summarized in a manuscript suitable for publication in an academic journal. She also completed a digital transcription of an early twentieth century archival document by the archaeologist, Max Uhle, in which she embedded associated digital images of artifacts.

#### Sabbatical Leave Report

#### A. Applicant

Name: Laura Sparks

Department: Earth & Space Sciences

Type of Leave: Project

Leave Dates: Fall 2019 and Spring 2020

#### **B.** Purpose of Leave

The overall outcome and goal of my proposed sabbatical leave is to write an open-source lab manual for the Astron 3L course at SRJC. This manual could then be used by all instructors in the department and potentially used at other schools as well.

In order to support the overall outcome, I intend to research and study the current practices, needs, and equipment holdings pertaining to introductory astronomy labs at other community colleges and universities. I will also study cutting edge research practices and new data sets in topics that are covered in our introductory lab in order to incorporate authentic, real-world experiences into the lab activities printed in the manual.

## C. Objectives

- 1. Visited at least three community colleges (ultimately visited seven) to meet with astronomy faculty and discuss their astronomy lab course content and equipment holdings.
- 2. Visited at least two four-year colleges (ultimately visited two) and/or universities to meet with astronomy faculty and discuss their introductory astronomy lab course content and equipment holdings.
- 3. Wrote a lab manual for the Astronomy 3L (Stellar Astronomy Lab) course at SRJC. The lab manual is ready for testing with SRJC students.
- 4. Read and summarized one recent peer-reviewed journal article related to each of the following topics:
  - Spectroscopy
  - New stellar parallax measurements
  - Binary stars and stellar mass
  - o Supernovae
  - The structure and evolution of the Milky Way Galaxy
  - Galaxy classification
  - Dark energy and the expansion of the universe

For the last topic, I went beyond my original plans and did more extensive study, working

through online tutorials to learn how to do modern data analysis myself:

- New HR Diagrams for novel data sets
- 5. Interviewed at least one astronomer or astrophysicist (ultimately interviewed six) currently engaged astronomical research to discuss how to incorporate his or her research into an introductory astronomy lab.

## **D.** Narrative

#### Preparation

I set out intending to freely share the lab manual as an open-source resource for other astronomy teachers. To that end I created a needs assessment survey with the help of the SRJC institutional research department in fall 2019. I distributed the survey to about 700 college astronomy teachers via an email list and Facebook group. I received over 50 responses and used the results to inform the rest of my sabbatical. The survey questions and results are included as an appendix.

Immediately preceding the official start of my sabbatical, I was chosen through a competitive process to participate in the Astronomy in Chile Educational Ambassador Program (ACEAP). I travelled with a group of educators for 10 days to NSF-funded astronomical observatories and research facilities in Chile in July and August 2019. I received unparalleled access to data and personnel at these facilities, which directly led to the creation of new lab activities incorporating their research and data. As part of my obligation to the ACEAP program, I gave five public lectures about astronomy in Chile in Sonoma County (including an SRJC Arts & Lectures talk in March 2020) and created an annotated photo and video album for dissemination on social media. A link to the album on Facebook is included as an appendix.

#### Objectives 1 & 2 - Visiting Community Colleges and Universities

I exceeded my goal by visiting seven community colleges and two universities: Diablo Valley College, College of San Mateo, Skyline College, West Valley College, and Sonoma State University locally in September 2019, as well as Mesa Community College, Glendale Community College, Paradise Valley Community College, and Arizona State University in the Phoenix, AZ metro area in October 2019. During these visits I met with 23 different astronomy instructors. The conversations I had were incredibly enlightening and shaped everything that I did for the rest of the year. Key takeaways:

- 1. Every school does things completely differently. There is no "standard" astronomy lab course.
- 2. Teachers are very unlikely to wholly adopt a new lab manual, and instead prefer to use or adapt individual labs that fill gaps in their curriculum.
- 3. There is a hunger for "hand-on" astronomy labs in which students are doing something authentic and active, not filling out pen-and paper or computer labs. Instructors are also very interested in labs using real, contemporary astronomical data.

4. Many teachers were looking for observational astronomy lab exercises using telescopes or the naked eye to make observations and measurements. I adjusted my plan to include more of these in my project.

## Objective 3 – Lab Manual

I began the project thinking that the lab manual would be a written document, with labs printed out weekly to use in the classroom. In March 2020 it became clear that this approach was no longer ideal due to COVID-19. I shifted my focus to start optimizing labs for the online format. My completed "lab manual" is therefore a mix of standard written labs and online content including video instructions. All the online labs are housed in a Canvas sandbox course shell. Due to the urgency of the situation caused by COVID-19 and the finding that many instructors desired observational astronomy labs, I also focused my efforts from March onward on topics that crossover and are covered in both Astron 3L (Stellar Astronomy Lab) as originally planned and Astron 12 (Observational Astronomy) so that SRJC instructors for both courses could pick and choose from them.

I had originally planned to write 14-18 lab activities. I met this goal by writing 18 lab activities.

- Angular Size
- ALMA, the Atacama Large Millimeter Array\*\*
- Cepheid Variable Stars\*
- Learning the Constellations
- Light and Color
- Light Pollution Investigation
- Magnitudes\*
- Measuring the Size of Planets
- Observing the 20 Brightest Stars
- Parallax\*
- RR Lyrae\*\*
- Solar Observing\*
- Star Charts
- Star Clusters\*
- Star Wheels
- Stellar Spectra and HR Diagrams\*
- Studying Star Clusters with Gaia [3-week project]\*\*
- Your Own Star

\*These labs incorporate real astronomical data from publicly available sources \*\*These labs incorporate real astronomical data, and they are based on interviews and correspondence with professional astronomy and astrophysics researchers, fulfilling Objective 5.

All labs and many associated instruction videos are available to the committee in a Canvas course shell appendix.

#### Objective 4 – Article Summaries

This proved to be an unexpectedly rich portion of my sabbatical. To fully understand each article, I spent a great deal of time on background reading such as reading and working out all the problems in an entire cosmology textbook. This process truly transformed my thinking on a number of topics and on the state of astronomy today. I read and summarized the following papers on the planned topics:

- Confirmation of Water Emission in the Dayside Spectrum of the Ultrahot Jupiter WASP-121b [Topic: Spectroscopy]
- Gaia Data Release 2: Using Gaia Parallaxes [Topic: New stellar parallax measurements]
- Eclipsing Binaries in the Open Cluster Ruprecht 147III: The Triple System EPIC 219552514 at the Main-Sequence Turnoff *[Topic: Binary stars and stellar mass]*
- The Early Blue Excess from the Type 1a Supernova 2017cbv and Implications for its Progenitor *[Topic: Supernovae]*
- Variable Stars in the Field of the Hydra II Ultra-Faint Dwarf Galaxy [Topic: The structure and evolution of the Milky Way Galaxy]
- Galaxy Classification: Deep Learning on the OTELO and COSMOS Databases [Topic: Galaxy classification]
- A 2.4% Determination of the Local Value of the Hubble Constant [Topic: Dark energy and the expansion of the universe]
- Tutorial: Exploring Gaia Data with TOPCAT and STILTS [Topic: New HR Diagrams for novel data sets]

The article summaries are included as an appendix.

#### Objective 5 – Interviewing Researchers

I exceeded this goal by interviewing six different research astronomers and astrophysicists and incorporating some of their research into lab activities (marked with asterisks in Objective 3).

- Kathy Vivas at Cerro Tololo Inter-American Observatory (CTIO), Chile. Ongoing communication from August 2019-January 2020. Kathy is a leading expert in RR Lyrae variable stars. I used Kathy's paper listed in Objective 4 as the basis of a new lab activity. She shared her data from DECam at CTIO with me and walked me through the data analysis steps so that I could replicate them in a simplified way. I featured a brief bio of her in the lab activity introduction to showcase her as an extremely successful woman of color in science.
- Eddie Schlafly at Lawrence Livermore National Labs, California. Interviewed 3/19/2020. Eddie is a leading expert in dust within the Milky Way Galaxy. He walked me through his research and also showed me how to retrieve data from the Gaia DR2 archive. Based on his help, I was inspired to create a three-week lab activity in which students query the Gaia DR2 database and create HR diagrams for star clusters using the modern "big data" approach.
- Paolo Cortes at the Atacama Large Millimeter Array (ALMA), Chile. Met in-person at ALMA 8/3/19, email correspondence on 10/13/19. He explained a lot of technical details

about ALMA to me, which led to the creation of a new lab activity.

- Geronimo Villanueva and Gabrielle Engelmann-Suissa at Goddard Space Flight Center, Maryland. Conference call on 1/17/20. I spoke with them at length about incorporating their planetary atmosphere models and simulations into introductory astronomy labs. I ultimately decided this would fit best into Astron 4 which is beyond the scope of my sabbatical. I plan to pursue this in the future.
- David Williams at the School of Earth and Space Exploration (SESE) at Arizona State University. Interviewed 10/22/19. We spoke at length about modern techniques for imaging and mapping planetary surfaces, specifically Mars. This would fit best into Astron 4 which is beyond the scope of my sabbatical. I plan to pursue this in the future.

#### **E.** Evaluation Summary

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

This sabbatical reinvigorated my approach to teaching lab courses. I learned about cuttingedge data analysis techniques that can be used directly with students. By visiting and touring other departments, observatories, and research facilities I will forged new and strengthened existing professional ties. I now have many contacts throughout the country whose expertise and connections I can draw on when writing new classroom content. Reading and summarizing peer-reviewed articles on new research techniques and findings has inspired me to change my approach to many topics in all of my lecture courses. I will be able to inspire students with new insights and up-to-date astonishing stories about astronomy research.

- 2. How did this sabbatical leave benefit students in my discipline? Students in our lab classes will have consistently high-quality course materials to work with. The new labs incorporate real-world research and focus on giving the students an authentic scientific experience. This will improve learning, retention, satisfaction with the course, and lifelong science literacy and attitudes about science
- 3. How did this sabbatical leave benefit my department?

This sabbatical has had an immediate and direct. Other SRJC astronomy instructors are already relying on the materials I created as they deliver their courses in an online format during summer 2020. It was very fortunate that I was on sabbatical in spring 2020 and able to devote so much time and energy to developing online astronomy labs while my colleagues were too busy managing their unprecedented rapid transition of all classes online. Additionally, in the long-term this sabbatical will make it easier to recruit and retain adjunct instructors since we will be able to hand them ready-made lab resources for them to work from. Previously, new instructors would have to develop their own lab materials which led to some frustrating outcomes for instructors and students alike. This will be a major positive change going forward.

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

This project addressed multiple Strategic Plan objectives. B. Foster Learning and Academic Excellence: Support and promote teaching excellence across all disciplines; Engage students and spark intellectual curiosity in learner-centered environments; Identify and implement responsive instructional practices that increase the learning and success of our diverse students. This project supports teaching excellence within my department by providing new instructors with a customizable, modular, high quality teaching resource. The project also addresses the Earth & Space Sciences departmental mission component: ESS courses attempt to connect the academic realm with the real world, providing students with the theoretical and hands-on skills and knowledge to take what they learn in the classroom and apply it to their daily lives. The lab manual will be used in a student-centered interactive learning environment. The hands-on, authentic experience provided by working with real data will appeal to a variety of learners and help with retention and success of students who may struggle with more traditional academic assessment.

#### F. Abstract for Board Report Summary

During her Fall 2019 - Spring 2020 full year sabbatical, Laura Sparks visited seven community college and two university astronomy departments to research their astronomy lab course content and practices. She performed a literature review and interviewed six astronomy researchers to determine ways to incorporate real-world data into introductory astronomy labs. She created an open-source lab manual consisting of written and online materials for SRJC's Astron 3L course.

#### Sabbatical Leave Report

## A. Applicant

Name: Carlos Valencia Department: College Skills/Tutorial Type of Leave: Research Project Leave Dates: Fall 2020

## **B.** Purpose of Leave

I conducted research on how at least three (3) California Community Colleges have incorporated developmental mathematics content and pedagogy into their transfer-level mathematics courses as a result of implementing AB 705 at their campuses.

# C. Objectives

- 1. I prepared a report, which is included as an appendix, summarizing my research findings regarding how at least three (3) California Community colleges have incorporated developmental mathematics content and pedagogy into their transfer-level mathematics courses as a result of implementing AB 705.
- 2. I developed a PowerPoint presentation incorporating my research findings, which is included as an appendix. The presentation is tentatively scheduled as a session at the Spring 2021 PDA day.

## **D.** Narrative

The signing into law of Assembly Bill (AB) 705 in October 2017 fundamentally changed how students are now placed in English and Mathematics courses throughout the California Community College (CCC) system.

Whereas most (if not all) incoming students were previously placed into English and Mathematics courses via a placement test, AB 705 mandates the use of multiple measures for placement. AB 705 also restricts community colleges from placing students into remediation unless placement research shows that the student is *highly unlikely to succeed* in transfer-level English or Mathematics courses. The legislation also calls for community colleges to maximize the support of students who begin in transfer-level English and Mathematics courses, with concurrent support, including corequisite models and resources from learning assistance.

Full implementation of AB 705 was required across the CCC system by Fall 2019.

Objective 1: During the Fall 2020 semester I researched how Foothill, Santa Rosa, and Shasta community colleges incorporated developmental mathematics content and pedagogy into their transfer-level mathematics courses as a result of implementing AB 705 at their campuses. Due to COVID-19 restrictions in place statewide during the course of the research, in lieu of site visits I conducted virtual interviews with key mathematics faculty at each of the three aforementioned colleges and conducted additional data gathering via the California Community College Chancellor's Office (CCCCO) web portal and aforementioned colleges' web portals. My research findings are included as an appendix.

Objective 2: I created a PowerPoint presentation that incorporates my research findings, which is also included as an appendix. The presentation is tentatively scheduled as a session at the Spring 2021 PDA day.

## **E.** Evaluation Summary

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

Given that the Spring 2021 semester has not yet started, I can only venture to say that I'm returning from my sabbatical leave with a renewed vision of what I believe our College Skills mathematics courses should consist of, as well as how to teach said courses. At the same time, I'm returning with ideas of how to better incorporate developmental mathematics into courses that I teach within the Mathematics Department.

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

With the insights I gained from like-minded colleagues throughout the state, I believe myself better prepared to serve College Skills students taking our *Foundations of Mathematical Reasoning* course – which is currently the department's primary post-AB 705 mathematics course.

In addition, within the Mathematics department courses that I will teach, it is my hope that modifications to my statistics courses that I've made based on my sabbatical research will better meet the needs of my students.

3. How did this sabbatical leave benefit my department?

I'm returning from my sabbatical leave with the intention of facilitating a reimagining of the College Skills department as <u>the</u> lead SRJC resource in providing pre-transfer level mathematics courses.

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

My project addresses the following values of SRJC's Strategic Plan:

- Learning: The project directly addresses developmental math aspects of access to math programs and courses that lead to transfer and/or gainful employment.
- Academic Excellence: The project directly addresses collaboration (with other community colleges) to improve the quality of College Skills math programs and services.
- Innovation: The project presents multiple perspectives of how to address the needs of developmental math students in response to state legislative changes (i.e., AB 705).

# F. Abstract for Board Proposal Summary

Carlos Valencia researched how Foothill, Santa Rosa, and Shasta Colleges have incorporated developmental mathematics content and pedagogy into their transfer-level math courses as a result of implementing AB 705 legislation. Due to statewide COVID-19 restrictions, in lieu of site visits he performed virtual interviews with key mathematics faculty at each of the three colleges and conducted additional data gathering via the California Community College Chancellor's Office (CCCCO) web portal and the colleges' web portals. He has provided a written report to his department and will share his findings with interested SRJC faculty and staff at the Spring 2021 PDA day.