

AGED 539

Graduate Internship in Agricultural Education Report & Project



Salinas - Rancho San Juan

FFA

Presented By:
Kacey Cadwell
June 10th, 2021

Criteria 1 - Curriculum and Instruction

1A. The curriculum includes the components required under Section 52454 of the Education Code: organized classes in the study of agriculture science and technology; student supervised agricultural experience; and a program of leadership, organization and personal development.

Rancho San Juan High School's Agriculture Department currently has two full time teachers with the addition of a third teaching in the 2021 - 2022 school year. We currently offer 6 courses spread across three pathways. Every student enrolled in our agriculture classes is automatically enrolled in the FFA. In the 2020 - 2021 school year we had 279 students on our roster. In each of our agriculture classes we require students to complete one approved SAE project with the completion of an AET record book and five FFA activities per semester. Both requirements are each worth 5% of the overall student grade totaling 10% of each semester grade.

Current Classes Offered:

- Sustainable Agriculture Biology
- Chemistry and Agriscience
- Agriculture Mechanics ½
- Agriculture Mechanics ¾
- Introduction to Seed Science and Technology
- Advanced Plant Genetics and Breeding

1B. A minimum of three sequential pathway courses consistent with the Career Technical Education Model Curriculum Standards of the Agriculture and Natural Resources Industry sector. Curriculum addresses both "Pathway and Anchor" standards.

All of the classes that are offered in our department meet the California Department of Education Standards for Agriculture and Core Curriculum. Currently our pathways are two sequences but will be changing to meet funding requirements in the fall.

1C. Career pathways in agriculture have been identified and can be found on a chart or diagram in the Program Plan.

All of our career pathways are identified below:

Agriscience Pathway	Sustainable Agriculture Biology	Chemistry & Agriscience
Seed Science and	Introduction to Seed Science	Advanced Plant Genetics and

Technology Pathway	& Technology	Breeding
Agriculture Mechanics Pathway	Agriculture Mechanics ½	Agriculture Mechanics ¾

1D. The school master schedule allows students to follow the recommended sequence of agriculture courses to complete the selected career pathway.

All of the students that enter our program are enrolled in Sustainable Agriculture Biology. This year we offered three sections of the course and there were 73 students enrolled. During this course students are taught an extensive FFA unit where we discuss the opportunities available to them throughout their four years in our program. In their second year they take Chemistry and Agriscience because our district does not have much room for open electives in the student schedule so their required science units for graduation can be completed. From there students have the opportunity to choose to continue in the science portion of our program or move to the agriculture mechanics side. Our counselors work hard to ensure students can take all of the classes that they need to be program completers while fulfilling their graduation requirements.

1E. Agriculture Career Awareness information is included in every course.

A career unit is taught in every course within our program. In the freshman level course it is a more broad career unit covering careers in every pathway of agriculture and then narrows focus as we get into our more specific pathways.

1F. Recordkeeping is taught in all agriculture classes. Every student maintains and completes (closes out) either an actual SAE Project or Mock Problem.

Every student enrolled in our program is required to keep records of their SAE project and FFA activities/participation in our online AET record book system. 10% of the students overall semester grade is through the creation and maintenance of their record book. There are a set of criteria established by both teachers in the department on what needs to be completed in order to receive the 10%. Both teachers give students in and out of class time throughout the semester to ask questions and ensure completion of their book.

1G. Agriculture courses have been submitted to meet high school graduation requirements and/or University of California a-g credit.

All classes in the program have been submitted and approved for UC a-g requirements.

- Sustainable Agriculture Biology - approved “D” lab science
- Chemistry and Agriscience - approved “D” lab science
- Agriculture Mechanics ½ - approved “G” college preparatory elective
- Agriculture Mechanics ¾ - approved “G” college preparatory elective
- Introduction to Seed Science and Technology - approved “D” lab science with honors
- Advanced Plant Genetics and Breeding - approved “D” lab science with honors

1H. Instruction includes guest speakers and/or field trips.

All of our courses include providing students with hands-on experiences and opportunities through guest speakers and job shadowing. The Seed Science pathway takes students to 4 different local seed companies and gives them the opportunity to experience a variety of careers within the seed industry. Our other classes utilize a platform called Virtual Job Shadow where we are able to connect with industry professionals at a distance to give students the chance to ask questions and really witness what careers in the agriculture industry look like.

Criteria 2 - Leadership and Citizenship Development

2A. An FFA Chapter has been chartered by the State Association or has been applied for.

Salinas - Rancho San Juan FFA Chapter number 0594 is a part of the California State FFA Association and the National FFA Organization. Our program was chartered in 2019. This year our chapter had 279 members.

2B. A Chapter Program of Activities is developed annually and a copy is made available to the Regional Supervisor by November 15th.

The Rancho San Juan Program of Activities is completed annually by the FFA Advisor, Kacey Cadwell and the current officer team. It is completed and shared with our regional supervisor Greg Beard digitally by November 15th. The current POA is provided in this document but due to the nature of our first year program is still a work in progress.

2C. Every student is given a grade based upon participation in leadership activities. (per Ed Code Section 52454)

Every semester we require that all students earn at least 5 FFA credits, one of which is attending a chapter meeting. Every semester we offer roughly 15 different opportunities for students to earn credits if not more so this requirement is not very hard to obtain. These 5 credits after being successfully entered in their AET record book, are worth 5% of the overall semester grade.

2D. The program has a clearly stated department policy that identifies the criteria for a student to earn full credit for leadership development.

In the Rancho San Juan Agriculture department we require every student enrolled in an agriculture class to earn five FFA points a semester. Students can earn points by participating in activities throughout our chapter such as monthly chapter meetings, chapter community service activities, chapter socials, leadership conferences and chapter fundraisers. Each semester the 5 points are worth 5% of their final grade.

2E. All students enrolled in agriculture classes are affiliated with the State FFA Association.

All students enrolled in an agriculture class at Rancho San Juan are automatically a registered FFA member. When we begin to have graduates of our program pursuing their American degree we will also continue to register them as official FFA members until they have obtained their American degree. This year CalAgEd is no longer a way for us to view our R-2's so I have printed rosters by class and subject to fulfill this requirement.

2F. Based on previous year's records, the department participated in a minimum of 12 activities as listed on the FFA Activities Check Sheet.

This year our program had students participate in 13 activities as listed on the FFA Activities CheckList. The following are opportunities our program participated in this year:

Sectional Activities

- Creed
- BIG
- Employment Skills
- Impromptu
- Extemporaneous
- Prepared
- Sectional Parliamentary Procedure
- Sectional Leadership Night

Regional Activities

- Creed
- Impromptu
- Employment Skills
- Chapter Officer Leadership Conference
- Fall and Spring Meeting

State Activities

- CA FFA State Leadership Conference
- Advanced Leadership Academy
- Employment Skills

2G. A minimum of 80% of the students participate in at least three leadership development activities annually as verified by department records.

A minimum of 80% of our membership has participated in at least three leadership development activities annually as kept in their AET record book. This year with the nature of distance learning we were not able to use our meeting manager in AET to manage meetings but next year we will use the student barcodes and meeting manager in AET to keep track of students activities and involvement.

Criteria 3 - Practical Application of Occupational Skills

3A. Student participation in Supervised Agricultural Experience (SAE) is part of the grading criteria for every agriculture student in the program. (per Ed Code Section 52454)

Every student enrolled in an agriculture class is required to maintain and complete an approved SAE project and keep their AET record book up to date with that project. This year with the nature of distance learning their completed SAE project and AET record book were only worth 5% of their total semester grade but will go back up to 10% after the pandemic when schools are reopened so that students can utilize our facilities.

3B. The program has a clearly stated department policy that identifies the criteria for a student to earn full credit for their SAE.

A school wide policy between teachers was established that every student enrolled in an agriculture class is required to complete an SAE project, which accounts for 5% of their overall semester grade. If a student is enrolled in multiple courses in one year they are only required to complete one SAE project. Through the semester the department provides students in class time to update their record books in order to ensure they are done correctly. When we return to in person instruction this fall, students will be required to complete a poster presentation of their SAE project and present it in front of their classmates. Eventually we would like to make this program wide and invite other students, teachers and administrators to come and showcase the successes in our program.

3C. First year students have either been engaged in a SAE project(s) or have a plan in place for a SAE, as verified by the Student's AET Experience Manager

First year students have similar expectations when it comes to the completion of their SAE project except the hour requirement is reduced to ten hours. Most of our membership went above the ten hour minimum but this reduction in hours ensures that members do not feel pressured to complete some huge project within their first year in the program if they choose not to do so. At Rancho San Juan we spend a lot of time going over SAE guidelines and types of projects so that students find a project to pursue that falls into their interest, not just something they have to complete for the sake of a grade.

3D. A minimum of 80% of continuing students are engaged in SAE project(s) as verified by Department records.

Continuing students are also expected to maintain and complete an approved SAE project by the end of the year with a twenty hour requirement instead of ten. Most of our membership hits the twenty hour goal with no issues and a handful of our membership was able to exceed this hour requirement. When we are able to utilize our school facilities in the future I am confident the number of students over twenty hours will significantly increase.

3E. Students with SAE projects are visited by their agriculture teacher and the visits are documented in Department records. (ex: Ag. Experience Tracker)

This past year with COVID-19 it was very difficult for us to go out and see students' projects in person. Both agriculture teachers were new to Rancho San Juan and did not have any established rapport with parents or most of the membership. As a result home visits were very low. In my classes I tried to use distance learning as an opportunity doing home visits with parents virtually but many were not comfortable meeting with me over a screen. Next year it is my goal to conduct more home visits with families that are willing and make other arrangements to connect with parents for those that are not willing to have me at their home.

3F. Students apply for advanced degrees and/or awards above the local level based on their SAE.

Due to the nature of being a second year program it is a little harder for us to apply for above the chapter degrees at this time. We had 1 student that was enrolled in an agriculture program her freshman year at a different school but the advisor before us never started record books with her. For that reason we spent the first half of the school year doing our best to catch up with her books but encountered many problems with AET. We were unable to meet the deadline for proficiencies and the California State FFA Degree. This student since then has done

a very good job catching up with their books and will be eligible again next year along with a few other students.

Criteria 4 - Qualified & Professional Personnel

4A. Every teacher has an appropriate credential. (Single Subject Agriculture & Agriculture Specialist or a Designated Subject Agriculture) or has an approved variance request.

Nicole Booten and I both have preliminary Single Subject Credentials in Agriculture and Preliminary Ag Specialist Credentials (We will be finishing induction this month)

4B. Based on the previous year's records, every agriculture teacher, teaching at least ½ time agriculture, attends a minimum of four professional development activities: (Complete attachment).

This year the department attended two virtual sectional meetings, 2 virtual regional meetings, a virtual CATA Roadshow and will attend a virtual CATA summer conference. Nicole Booten and I also attended our second year of New Professionals.

4C. The agriculture staff meets a minimum of twice a month. This is to be verified by minutes or records of action taken. The records of such meetings are shared with the principal.

As a staff we meet once a week and discuss department matters and upcoming FFA events. Weekly we also meet with a district wide agriculture PLC to collaborate with our subject areas. Nicole Booten meets with the agriculture mechanics PLC and I meet with the agriscience PLC. Our minutes were shared with our principal Anthony Hinton via Google Drive. The department has access to the entire folder.

4D. Teachers are reimbursed for personal expenses they incur while participating in all approved integral activities associated with FFA, SAE, and professional CATA in-service activities.

As the Department head at Rancho San Juan I am the one that works closely with our administration to the appropriate paperwork turned in for reimbursement. Being a first time department head during a year of distance learning proposed many challenges for myself but as our restrictions loosened and I was able to return to campus I was able to work more closely with my principal's secretary to ensure I was turning in the correct paperwork at the right time. I know that next year I will be alot better with this process as I am usually very organized with paperwork.

Criteria 5 - Facilities, Equipment & Materials

5A. Modification of facilities and equipment has occurred when necessary, based on the needs of students, including special populations.

The current facilities at Rancho San Juan High School are currently the “science” classroom located inside of our main campus building and our agriculture mechanics shop. This summer a greenhouse will be installed on a small acre plot of land out on campus for us to begin the creation of a school farm. We are hoping to be able to utilize that greenhouse by the fall of this year and if not January of 2022. Some science classes will be taught out of the mechanics shop even though it is not set up as a science lab so we are working on buying storage cabinets this summer to move some of the science equipment over to the mechanics shop. My science classroom is set up for labs and experiments that do not require ventilation but have still not had students in the class to utilize all of our space. The only thing my classroom does not have is a handwashing sink, all of the sinks are equipped for labs.

5B. There is appropriate storage space for materials, records, equipment and supplies.

In my classroom there is an adequate amount of storage space with approximately 18 cabinets for science equipment, a closet cabinet for FFA supplies, and a storage room right off of my classroom for school supplies and lab equipment sanitation. The agriculture mechanics shop has a large storage room for most small equipment and supplies, two large tool storage cabinets, and we are looking into installing a class set of lockers for students to store materials during the period. Located outside of the mechanics shop we are currently utilizing a storage container that our principal said we could use until the farm is set up. Once the greenhouse is set up I would like to look into a small shed that will be located out on the property for equipment storage.

5C. Community or school-based laboratory facilities have been provided to accommodate students who have no place for their SAE project(s)

Prior to COVID - 19 the district leases a small, not very well maintained farm down the street from our school for students to house SAE projects. When the pandemic hit, the district shut down the facility for student safety concerns and will be reopening this summer for fall fairs. Nicole and I are working to network with community members and potentially find a site for students to house animals during the year that is safer and more efficient for our needs. Our school greenhouse is set to be installed this summer.

5D. The facilities are appropriately equipped for the courses being taught.

All of our classrooms have the appropriate equipment for the classes taught. In the mechanics shop the rest of our equipment needs to be installed before the start of the 2021 - 2022 school year so that students can begin hands-on learning in that classroom. Hopefully our greenhouse will be installed by the beginning of this school year so that students are able to begin plant breeding projects in the fall for our Seed Science Pathway and Agriscience Pathway.

5E. A school vehicle is readily available to each agriculture teacher for all SAE activities and transporting students associated with the program, or each teacher is adequately compensated for using their own personal vehicle. There is a replacement schedule for the vehicle.

The Salinas Union Joint High School District and Mission Trails ROP School currently have a van on site for the agriculture department to utilize to take students to FFA Activities and Conferences. If approved, out of district volunteers can drive the vehicle with appropriate credentials and paperwork. In order to utilize my school vehicle I must put in a transfer request to the principal's secretary which can sometimes be an issue if I need the vehicle in a crunch. Right now we do not have any funding for our department to purchase an agriculture specific department vehicle.

5F. The reviewer verified by visual observation that the agriculture facilities are neat, clean, and orderly. Facilities and equipment are regularly maintained, repaired, or replaced and are functional and operational.

Our school facilities are fairly clean due to the fact that our school is still very new and did not fully open up during distance learning. The shop is still in the works of being fully functional for the upcoming school year and my science classroom was only used for a few months before schools shut down in 2020. When we return to full instruction it is my goal to go through each already very organized cabinet and label what is inside so that it is an easy check in system for when students do end up using the equipment. The facilities itself are maintained by our plant foreman and facilities. They do an incredible job ensuring the cleanliness of the campus and our rooms.

Criteria 6 - Community, Business & Industry Involvement

6A. The Advisory Committee is operational and reflects the local agricultural industry for the courses being offered, as outlined in the "Agricultural Education Advisory Committee Manual"

The Rancho San Juan FFA Advisory Committee consists of community members with expertise in agriculture and careers that have an agriculture interest. Our advisory committee meets three times a year to ensure the success of our agriculture program by influencing our department and our future goals.

The current advisory committee members include:

Xavier Barba - Ready Pac

Ashlee Barba - Pro* Act

Kollin Holzwart - Agriculture Consultants International

Kort Holzwart - Premier Tech

Barbara Perry - Keithly-Williams Seed Co.

Kyle Trotter - Wilbur-Ellis

Stan Uchiyama - Retired Agriculture Instructor (North Salinas High School)

Kacey Cadwell - Rancho San Juan High School Agriculture Teacher

Nicole Booten - Rancho San Juan High School Agriculture Teacher

6B. The Agricultural Advisory Committee meets at least twice each year. (Three meetings recommended)

This year our advisory committee was able to meet three times. While also following the agenda of our regional supervisor we spent our first meeting introducing ourselves to the committee and discussing our backgrounds and expertise. We spent most of our meeting getting to know our committee members and planning out our future meetings to make sure that everyone was on the same schedule.

6C. The Agricultural Advisory Committee has assisted in the development or revision of the following components of the Comprehensive Program Plan, as evidenced in the Ag. Advisory Committee minutes

After our introductions in the fall the committee began discussing certain components of the program plan. In our first spring meeting we discussed program and course objectives, course outlines, budgets, and our five year facility and equipment acquisition plan. As our program continues to grow and we have graduates from our program I would like to begin the discussion of occupations, graduate follow-up data and program completion standards. Our advisory does an excellent job incorporating their knowledge of industry standards with student interest and the needs of our students and community.

6D. The Agricultural Advisory committee minutes clearly reflect programmatic recommendations made by the committee.

Our Advisory Committee minutes are taken each meeting by our secretary, which this year was myself. In a normal year I would print and distribute minutes to all of our committee members prior to the meeting for them to review. Due to distance learning all of our meetings

this year were virtual. The previous meeting minutes and the current meeting agenda were shared with the committee 1 - 2 weeks before each meeting for them to review and suggest revisions. All of our minutes are stored right now in our google drive but this next year I would like to create a physical record of all of our advisory committee history for us to keep.

6E. The Agricultural Advisory Committee minutes are shared with the principal, superintendent, school board and Regional Supervisor.

Right now all of our Advisory Committee minutes are shared digitally with our principal, the CTE director, and our superintendent. I distribute our Advisory Committee minutes annually to our regional supervisor, Greg Beard, via our electronic program plan and as needed.

Criteria 7 - Career Guidance

7A. Evidence is provided that students are counseled regarding career opportunities in agriculture, agribusiness, and agriculture education.

A career unit is taught in all of our agriculture classes regardless of the subject. Our district also has access to a program where they send a career counselor into our science classes to work with students in order to take a career assessment their freshman year and then continue to update that profile throughout their time at Rancho San Juan. In all of our classes we bring in guest speakers and in our Seed Science and Technology Pathway students actually complete 100+ hours of job shadowing with 8 different seed companies before they graduate from our program. Since we fall under the CTE school they also provide us with a number of resources so that all of our students have access to a variety of in person and virtual opportunities.

7B. All students have a completed career plan on their AET Student Profile and it is updated annually.

As a part of their 5% SAE grade all students are required to complete and maintain their profile information at the beginning of each school year. Because we are a brand new school it is easy to set this stand now so that all of our students' future books are always up to date and accurate.

7C. Progress has been made in developing Student Certification based on industry standards.

All of our classes have access to ICEV so that students can earn a certificate in every class we offer. Our students in agriculture mechanics also do the OSHA Training Certification so that by graduation all of our students are shop safety certified and can take the right into the workforce if that is the path they choose to pursue.

Criteria 8 - Program Promotion

8A. The Agriculture Education program has materials that can be used to promote the program to the community and/or future students.

This year I created a digital brochure for the counseling department to use during our virtual recruitment in January. In a normal year we will send students to all of the local middle schools with a variety of materials so that we can promote our department even better than this year.

8B. Students have alternative means of overcoming financial barriers to participate in program activities. (Includes FFA, SAE, Leadership Activities.)

At Rancho San Juan fundraising will be a big part of the success of our program. Prior to COVID-19 the previous teacher had established a few concrete fundraisers to ensure student success for those that needed financial assistance. When we are allowed to return to in person instruction our biggest fundraisers will be See's Candy (completed during distance learning and had great success), Butter Braids, and 2 Drive Thru BBQ's. Our district is strict on what students get to use the funds raised so this ensures that students that want to be active members of our chapter help out financially so that they are able to have their events paid for.

8C. The Agriculture Department conducts recruitment activities with local feeder schools.

Rancho San Juan High School does not currently have any recruitment activities with local feeder schools because the school was shut down due to COVID during the first year. Next year our officer team is already in the works of planning a farm day/Ag in the classroom day at the local middle schools and one local elementary school so that we can start our recruitment process early on.

Criteria 9 - Program Accountability & Planning

9A. A Comprehensive Program Plan has been provided electronically to the Regional Supervisor and is available for onsite review.

The Rancho San Juan Agriculture Department does not currently have a completed Comprehensive Program Plan. As the department head, I am currently working on creating and maintaining this series of documents as my induction project for my cleared credential. My goal is to have this plan completely updated and finalized by the end of the 2022 school year. However the documents that are updated are shared with my regional supervisor, Greg Beard, by October 15th.

9B. Updates of the Program Plan are forwarded to the Regional Supervisor by November 15th. These updates must include: (1) Five Year Equipment Acquisition Schedule; (2) Chart of Staff Responsibilities; (3) FFA Program of Activities; (4) Advisory Committee Roster; and (5) Advisory Committee Minutes.

My induction project for my credential is to continue working on creating the comprehensive program plan. The teacher last year did not start this process and I will continue working on it into the next school year however these five documents are updated annually and shared with my regional supervisor Greg Beard:

- Five Year Equipment Acquisition Schedule
- Staff Chart of Responsibilities
- FFA POA
- Advisory Committee Roster
- Advisory Committee Minutes

9C. The Graduate Follow Up is posted on the state database as required *by October 15th*.

We currently have no graduates so we have no follow up data. Creating these surveys is my project for AGED 539.

9D. The Agriculture Education Program provides evidence that student retention and graduate follow up data is reviewed and used for program evaluation and improvement.

We only have one year of retention due to the school being open for two years and the numbers were not high. I do not believe this was due to the previous teacher that taught our classes. It was due to the nature of the pandemic and schools being shut down so the ability to recruit was hard. Since then our program has doubled in size and we should have roughly 400 members and three teachers in our program next school year.

9E. The FFA Roster and the Program and Teacher Profiles were updated on calaged.org and the AIG Expenditure Report was received; all by no later than October 15.

FFA Roster and Teacher profiles are no longer available on calaged.org and are updated via AET.

Criteria 10 - Student to Teacher Ratio

10A. Shop and laboratory-based classes have no more than 22 students enrolled. Classroom based classes have no more than 28 students enrolled. For a teacher to qualify for funding of

Criteria 10 they must meet the requirement for each period. (Enter the number of teachers appropriate for each column.)

By district requirement all of our science classes must have a minimum of 22 students and a maximum of 28. Our shop classes have a maximum of 25 so we usually do not meet this requirement. Our counselors are working very hard to reduce the number of students per class because we hired a full time third teacher next year but do not think our numbers will allow this to happen.

Criteria 11 - Full Year Employment

11A. Indicate for each teacher if they are provided an extended contract and are paid at least \$2,000. (Enter the number of teachers appropriate for each column.)

Currently our district does not offer an extended contract or summer contract to the agriculture teachers. The department head is allowed to utilize a 100 hour stipend for program preparation and paperwork but that is basically all we have right now in regards to summer funding. At Rancho San Juan my principal allows me to split the 100 hour contract with my teaching partner so that she can help me with the summer preparation. I feel it is important that we plan the year together so that we are on the same page and making group decisions for what is best for our students.

11B. Indicate for each teacher if they are provided a Project Supervision Period. To qualify, the project supervision period must be in addition to the preparation period assigned to all teachers in the school. (Enter the number of teachers appropriate for each column.)

No teachers in the Salinas Union High School district currently have a project supervision period.

Criteria 12 - Program Achievement

12. # of Students on R-2

Salinas - Rancho San Juan currently has 279 students enrolled.

12A. Leadership and Citizenship Development

During the 2020 - 2021 virtual school year we have 31 students participating in 13 different activities.

12B. Practical Application of Occupation Skills

This year Rancho San Juan only had 1 student eligible for her state degree but the previous teacher never did record books and thus the student was not able to turn in an application. She will be completing an application next school year.

12C. Qualified and Professional Activities

This year Nicole Booten and myself attended the required professional activities for the 2020 - 2021 school year.

12D. Community, Business, and Industry Involvement

This year our Advisory Committee met three times to discuss the program and how to help it continue to grow. This next year we are going to work to expand our Advisory to people that we know in the community as well.

12E. Retention

This year we did not have any retention because our program is only in its second year. Next year we will be able to have some third year retention.

12F. Graduate Follow-Up

This year we will not have any graduates that are program completers because the school is new and does not have a senior class.

We have no students that will be employed in agriculture, the military or continuing their education in agriculture because we have not had any students graduate from Rancho San Juan until the 2021 - 2022 school year.

Quality Criteria Supporting Materials

- Chapter Account
- Inbox
- Calendar
- Portfolio
- Scoreboard
- Sign Off

Cash/Checking: \$-30
 Current/Projects: \$0
 Non-Current: \$0
 Liabilities: \$0

- Student Help
- Teacher Help
- AET Classroom
- Ask AET a Question

My Program



Salinas-Rancho San Juan
 280 Students
 2 Teachers
 6 AET Log-ins this week

Privacy Settings

Scoreboard Privacy:
 Hide name in scoreboard?
 Yes No

Account Information and Settings



Program: Salinas-Rancho San Juan
Member Number: 603843353
Basic Profile Complete: 100%
Personal and Parent Contact Info: 100%
Emergency Info and Permission Forms: [EDIT](#)

Password: [Reset](#)

Profile Pic: [Upload](#)

Demographics [EDIT](#)

HS Graduation: June 2023
Shirt Size: -
Gender: Male
Race: No Answer
Ethnicity: No Answer
Residence: -

Primary Mailing Address [EDIT](#)

Address: [Redacted]
City, State, Zip: [Redacted]

Contact Information [EDIT](#)

Email: [Redacted]
Home Phone: [Redacted]
Cell Phone: [Redacted]

Parents/Guardians [EDIT](#)

Father / Parent / Guardian:
Name: [Redacted]
Occupation: [Redacted]
Phone Number: [Redacted]
Email: n/a
Address: (Same as primary mailing address above)

Mother / Parent / Guardian:
Name: [Redacted]
Occupation: [Redacted]
Phone Number: [Redacted]
Email: [Redacted]
Address: (Same as primary mailing address above)

Chapter Account

Inbox

Calendar

Portfolio

Scoreboard

Sign Off

Cash/Checking: \$0

Current/Projects: \$0

Non-Current: \$0

Liabilities: \$0

Student Help

Teacher Help

AET Classroom

Ask AET a Question

My Program



Salinas-Rancho San Juan
280 Students
2 Teachers
6 AET Log-ins this week

Privacy Settings

Scoreboard Privacy:
Hide name in scoreboard?
 Yes No

Account Information and Settings



Daniel Agamao

Program: Salinas-Rancho San Juan

Member Number: 603843280

Basic Profile Complete: **100%**

Personal and Parent Contact Info: **100%**

Emergency Info and Permission Forms: [EDIT](#)

Password: [Reset](#)

Profile Pic: [Upload](#)

Demographics [EDIT](#)

HS Graduation: June 2023
Shirt Size: XXL
Gender: Male
Race: Hispanic
Ethnicity: Hispanic
Residence: City

Primary Mailing Address [EDIT](#)

Address: [Redacted]
City, State, Zip: [Redacted]

Contact Information [EDIT](#)

Email: [Redacted]
Home Phone: [Redacted]
Cell Phone: [Redacted]

Parents/Guardians [EDIT](#)

Father / Parent / Guardian:
Name: [Redacted]
Occupation: [Redacted]
Phone Number: [Redacted]
Email: [Redacted]
Address: [Redacted]

Mother / Parent / Guardian:
Name: [Redacted]
Occupation: [Redacted]
Phone Number: [Redacted]
Email: [Redacted]
Address: [Redacted]

Chapter Account

Inbox

Calendar

Portfolio

Scoreboard

Sign Off

Cash/Checking: \$0

Current/Projects: \$0

Non-Current: \$0

Liabilities: \$0

Student Help

Teacher Help

AET Classroom

Ask AET a Question

My Program



Salinas-Rancho San Juan
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Privacy Settings

Scoreboard Privacy:
Hide name in scoreboard?
 Yes No

Account Information and Settings



Sarahi Aguilar-Diaz

Program: Salinas-Rancho San Juan
Member Number: 604464433

Basic Profile Complete: 100%

Personal and Parent Contact Info: 100%

Emergency Info and Permission Forms: [EDIT](#)

Password: [Reset](#)

Profile Pic: [Upload](#)

Demographics [EDIT](#)

HS Graduation: June 2024
Shirt Size: M
Gender: Non-binary
Race: Hispanic
Ethnicity: Hispanic
Residence: City

Primary Mailing Address [EDIT](#)

Address: [Redacted]
City, State, Zip: Salinas, CA 93906-4766

Contact Information [EDIT](#)

Email: [Redacted]
Home Phone: [Redacted]
Cell Phone: [Redacted]

Parents/Guardians [EDIT](#)

Father / Parent / Guardian:
Name: [Redacted]
Occupation: Driver
Phone Number: 831 210 3687
Email: [Redacted]
Address: 2185 N Main St., Apt 8, Salinas, CA 93906-4766

Mother / Parent / Guardian:
Name: [Redacted]
Occupation: [Redacted]
Phone Number: 831 210 1027
Email: [Redacted]
Address: 2185 N Main St., Apt 8, Salinas, CA 93906-4766

Chapter Account

Inbox

Calendar

Portfolio

Scoreboard

Sign Off

Cash/Checking: \$0

Current/Projects: \$0

Non-Current: \$0

Liabilities: \$0

Student Help

Teacher Help

AET Classroom

Ask AET a Question

Account Information and Settings

My Program



Salinas-Rancho San Juan
280 Students
2 Teachers
6 AET Log-ins this week

Privacy Settings

Scoreboard Privacy:
Hide name in scoreboard?
 Yes No



Aaron Aguirre

Program: Salinas-Rancho San Juan

Member Number: 604261545

Basic Profile Complete: 100% ?

Personal and Parent Contact Info: 0%

Emergency Info and Permission Forms: [EDIT](#)

Password: [Reset](#)

Profile Pic: [Upload](#)

Demographics [EDIT](#)

HS Graduation: June 2022
Shirt Size: -
Gender: Male
Race: No Answer
Ethnicity: No Answer
Residence: -

Primary Mailing Address [EDIT](#)

Address: [Redacted]
City, State, Zip: [Redacted]

Contact Information [EDIT](#)

Email:
Home Phone:
Cell Phone:

Parents/Guardians [EDIT](#)

Father / Parent / Guardian:
Name:
Occupation:
Phone Number:
Email:
Address: (Same as primary mailing address above)

Mother / Parent / Guardian:
Name:
Occupation:
Phone Number:
Email:
Address: (Same as primary mailing address above)

Chapter Account

Inbox

Calendar

Portfolio

Scoreboard

Sign Off

Cash/Checking: \$-20

Current/Projects: \$0

Non-Current: \$0

Liabilities: \$0

Student Help

Teacher Help

AET Classroom

Ask AET a Question

Account Information and Settings

My Program



Salinas-Rancho San Juan
280 Students
2 Teachers
6 AET Log-ins this week

Privacy Settings

Scoreboard Privacy:
Hide name in scoreboard?
 Yes No



Orlando Ahumada

Program: Salinas-Rancho San Juan

Member Number: 604261370

Basic Profile Complete: **100%**

Personal and Parent Contact Info: **0%**

Emergency Info and Permission Forms: [EDIT](#)

Password: [Reset](#)

Profile Pic: [Upload](#)

Demographics [EDIT](#)

HS Graduation: June 2022
Shirt Size: -
Gender: Male
Race: No Answer
Ethnicity: No Answer
Residence: -

Primary Mailing Address [EDIT](#)

Address: 13439 Kennedy Street
City, State, Zip: Salinas, CA 93904

Contact Information [EDIT](#)

Email:
Home Phone:
Cell Phone:

Parents/Guardians [EDIT](#)

Father / Parent / Guardian:
Name:
Occupation:
Phone Number:
Email:
Address: (Same as primary mailing address above)

Mother / Parent / Guardian:
Name:
Occupation:
Phone Number:
Email:
Address: (Same as primary mailing address above)


Account Information and Settings

- Chapter Account
- Inbox
- Calendar
- Portfolio
- Scoreboard
- Sign Off

- Cash/Checking: \$0
- Current/Projects: \$0
- Non-Current: \$0
- Liabilities: \$0

- Student Help
- Teacher Help
- AET Classroom
- Ask AET a Question

My Program



Salinas-Rancho San Juan
280 Students
2 Teachers
88 AET Log-ins this week

Privacy Settings

Scoreboard Privacy:
Hide name in scoreboard?
 Yes No



Mathea Alonzo-Ruelas

Program: Salinas-Rancho San Juan
Member Number: 603843292

Basic Profile Complete: 100% ?

Personal and Parent Contact Info: 100%

Emergency Info and Permission Forms: [EDIT](#)

Password: [Reset](#)

Profile Pic: [Upload](#)

Demographics [EDIT](#)

HS Graduation: June 2023
 Shirt Size: S
 Gender: Female
 Race: Hispanic
 Ethnicity: Hispanic
 Residence: -

Primary Mailing Address [EDIT](#)

Address: [Redacted]
 City, State, Zip: [Redacted]

Contact Information [EDIT](#)

Email: [Redacted]
 Home Phone: [Redacted]
 Cell Phone: [Redacted]

Parents/Guardians [EDIT](#)

Father / Parent / Guardian:
 Name: [Redacted]
 Occupation: [Redacted]
 Phone Number: [Redacted]
 Email: [Redacted]
 Address: (Same as primary mailing address above)

Mother / Parent / Guardian:
 Name: [Redacted]
 Occupation: [Redacted]
 Phone Number: [Redacted]
 Email: [Redacted]
 Address: (Same as primary mailing address above)

Log Out

Profile

Journal

Finances

Reports

Account Information and Settings

Chapter Account

Inbox

Calendar

Portfolio

Scoreboard

Sign Off

Cash/Checking: \$0

Current/Projects: \$0

Non-Current: \$0

Liabilities: \$0

Student Help

Teacher Help

AET Classroom

Ask AET a Question

My Program



Salinas-Rancho San Juan
280 Students
2 Teachers
6 AET Log-ins this week

Privacy Settings

Scoreboard Privacy:
Hide name in scoreboard?
 Yes No



Daniel Ahumada-Santa Maria

Program: Salinas-Rancho San Juan
Member Number: 603843335
Basic Profile Complete: 100%
Personal and Parent Contact Info: 100%
Emergency Info and Permission Forms: [EDIT](#)

Password: [Reset](#)

Profile Pic: [Upload](#)

Demographics [EDIT](#)

HS Graduation: June 2023
Shirt Size: L
Gender: Male
Race: Hispanic
Ethnicity: Hispanic
Residence: City

Primary Mailing Address [EDIT](#)

Address: [Redacted]
City, State, Zip: [Redacted]

Contact Information [EDIT](#)

Email: [Redacted]
Home Phone: [Redacted]
Cell Phone: [Redacted]

Parents/Guardians [EDIT](#)

Father / Parent / Guardian:
Name: [Redacted]
Occupation: [Redacted]
Phone Number: [Redacted]
Email: [Redacted]
Address: (Same as primary mailing address above)

Mother / Parent / Guardian:
Name: [Redacted]
Occupation: [Redacted]
Phone Number: [Redacted]
Email: [Redacted]
Address: (Same as primary mailing address above)

Chapter Account

Inbox

Calendar

Portfolio

Scoreboard

Sign Off

Cash/Checking: \$0

Current/Projects: \$0

Non-Current: \$0

Liabilities: \$0

Student Help

Teacher Help

AET Classroom

Ask AET a Question

My Program



Salinas-Rancho San Juan
280 Students
2 Teachers
6 AET Log-ins this week

Privacy Settings

Scoreboard Privacy:
Hide name in scoreboard?
 Yes No

Account Information and Settings



Edgar Alamo

Program: Salinas-Rancho San Juan
Member Number: 604464393

Basic Profile Complete: 100%

Personal and Parent Contact Info: 100%

Emergency Info and Permission Forms: [EDIT](#)

Password: [Reset](#)

Profile Pic: [Upload](#)

Demographics [EDIT](#)

HS Graduation: June 2022
Shirt Size: XXL
Gender: Male
Race: Hispanic
Ethnicity: Hispanic
Residence: City

Primary Mailing Address [EDIT](#)

Address: [Redacted]
City, State, Zip: [Redacted]

Contact Information [EDIT](#)

Email: [Redacted]
Home Phone: [Redacted]
Cell Phone: [Redacted]

Parents/Guardians [EDIT](#)

Father / Parent / Guardian:
Name:
Occupation:
Phone Number:
Email:
Address: (Same as primary mailing address above)

Mother / Parent / Guardian:
Name: [Redacted]
Occupation: [Redacted]
Phone Number: [Redacted]
Email: [Redacted]
Address: (Same as primary mailing address above)

Chapter Account

Inbox

Calendar

Portfolio

Scoreboard

Sign Off

Cash/Checking: \$0

Current/Projects: \$0

Non-Current: \$0

Liabilities: \$0

Student Help

Teacher Help

AET Classroom

Ask AET a Question

My Program



Salinas-Rancho San Juan
280 Students
2 Teachers
6 AET Log-ins this week

Privacy Settings

Scoreboard Privacy:
Hide name in scoreboard?
 Yes No

Account Information and Settings



Michelle Alvarado-Vasquez

Program: Salinas-Rancho San Juan
Member Number: 603843464

Basic Profile Complete: 100%

Personal and Parent Contact Info: 100%

Emergency Info and Permission Forms: [EDIT](#)

Password: [Reset](#)

Profile Pic: [Upload](#)

Demographics [EDIT](#)

HS Graduation: June 2023
Shirt Size: XL
Gender: Female
Race: Hispanic
Ethnicity: No Answer
Residence: -

Primary Mailing Address [EDIT](#)

Address: [Redacted]
City, State, Zip: [Redacted]

Contact Information [EDIT](#)

Email: [Redacted]
Home Phone: [Redacted]
Cell Phone: 8312580443

Parents/Guardians [EDIT](#)

Father / Parent / Guardian:
Name: [Redacted]
Occupation: [Redacted]
Phone Number: [Redacted]
Email: [Redacted]
Address: (Same as primary mailing address above)

Mother / Parent / Guardian:
Name: [Redacted]
Occupation: [Redacted]
Phone Number: [Redacted]
Email: [Redacted]
Address: [Redacted]

Chapter Account

Inbox

Calendar

Portfolio

Scoreboard

Sign Off

Cash/Checking: \$0

Current/Projects: \$0

Non-Current: \$0

Liabilities: \$0

Student Help


Teacher Help

AET Classroom

Ask AET a Question

Account Information and Settings

My Program



Salinas-Rancho San Juan
280 Students
2 Teachers
6 AET Log-ins this week

Privacy Settings

Scoreboard Privacy:
Hide name in scoreboard?
 Yes No



Delicia Alvarez

Program: Salinas-Rancho San Juan

Member Number: 604261228

Basic Profile Complete: 100% ?

Personal and Parent Contact Info: 0%

Emergency Info and Permission Forms: [EDIT](#)

Password: [Reset](#)

Profile Pic: [Upload](#)

Demographics [EDIT](#)

HS Graduation: June 2022
 Shirt Size: -
 Gender: Female
 Race: No Answer
 Ethnicity: No Answer
 Residence: -

Primary Mailing Address [EDIT](#)

Address: 55 E Bolivar Street
 City, State, Zip: Salinas, CA 95076

Contact Information [EDIT](#)

Email:
 Home Phone:
 Cell Phone:

Parents/Guardians [EDIT](#)

Father / Parent / Guardian:
 Name:
 Occupation:
 Phone Number:
 Email:
 Address: (Same as primary mailing address above)

Mother / Parent / Guardian:
 Name:
 Occupation:
 Phone Number:
 Email:
 Address: (Same as primary mailing address above)

Student Accounts

- Inbox
- Portfolio
- Scoreboard
- Explore SAE
- Classroom Resources
- Sign Off

- 2020-2021
 - SAEs: 195
 - Jrn Entries: 1,645
 - Jrn Hours: 2,669
 - Fin Entries: 167
 - Active Students: 207
 - Badges: 3
 - Cal. Activities: 82
 - Award Apps: 4

- Student Help
- Teacher Help
- AET Classroom
- Ask AET a Question

<p>Active Status:</p> <p><input checked="" type="radio"/> Active</p> <p><input type="radio"/> Inactive</p> <p><input type="radio"/> Practice AET</p> <p><input type="radio"/> Pending Transfers</p>	<p>Last Name Starts With:</p> <input style="width: 100%;" type="text"/>	<div style="text-align: right; font-size: small;">Student Finder Reset</div> <p><input checked="" type="checkbox"/> All Students</p> <p><input type="checkbox"/> Grade Levels</p> <p><input type="checkbox"/> FFA Membership</p> <p><input type="checkbox"/> Custom Groups</p>	<input type="button" value="Export"/>
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Add Accounts: One / Multiple
Automatic Operations: Reset All Student Passwords / National Roster Utilities
Multi-row Operations: Use the checkboxes to select one or more students.

<input type="checkbox"/>	Unique #	Name	Username	Grade	Last Access
<input type="checkbox"/>	2389737	Acosta, Ramiro	RAcosta	10	11/05/2020
<input type="checkbox"/>	2388781	Agamao, Daniel	DAgamao	10	12/17/2020
<input type="checkbox"/>	3060057	Aguilar-Diaz, Sarahi	SAguilar-Diaz	9	05/21/2021
<input type="checkbox"/>	2941758	Aguirre, Aaron	AAguirre	11	12/10/2020
<input type="checkbox"/>	2941863	Ahumada, Orlando	OAhumada	11	11/05/2020
<input type="checkbox"/>	2394200	Ahumada-Santa Maria, Daniel	DAhumada-SantaM	10	12/11/2020
<input type="checkbox"/>	3060214	Alamo, Edgar	EAlamo	11	05/25/2021
<input type="checkbox"/>	2389662	Alonzo-Ruelas, Mathea	MAlonzo-Ruelas	10	12/14/2020
<input type="checkbox"/>	2384779	Alvarado-Vasquez, Michelle	MAlvarado-Vasqu	10	02/09/2021
<input type="checkbox"/>	2942346	Alvarez, Delicia	DAlvarez	11	never
<input type="checkbox"/>	2389654	Alvarez, Manuel	MAlvarez	10	11/06/2020
<input type="checkbox"/>	3060215	Alvarez, Ramiro	RAlvarez	9	03/16/2021
<input type="checkbox"/>	3060331	Anaya-Zamora, Arturo	AAnaya-Zamora	9	05/21/2021
<input type="checkbox"/>	3060332	Andrade, Christopher	CAndrade	11	02/10/2021
<input type="checkbox"/>	3060292	Andrade-Guzman, Ivette	IAndrade-Guzman	10	05/21/2021
<input type="checkbox"/>	3060293	Apilado, Keanu R.	KApilado	10	05/27/2021
<input type="checkbox"/>	3060294	Araujo-De La Torre, Steve	SAraujo-DeLaTor	10	04/15/2021
<input type="checkbox"/>	3060188	Arredondo, Naliyah	NArredondo	9	05/07/2021
<input type="checkbox"/>	3060216	Arreola-Suarez, Jovanni	JArreola-Suarez	9	05/21/2021
<input type="checkbox"/>	2394176	August, Audream	AAugust	10	10/30/2020
<input type="checkbox"/>	3060295	Avilez, Pedro	PAvilez	10	05/13/2021
<input type="checkbox"/>	2942348	Ayala, Daniel	DAyala	11	12/10/2020
<input type="checkbox"/>	3060296	Ballesteros, Faith	FBallesteros	10	05/24/2021
<input type="checkbox"/>	3060217	Barajas, Jiovanny	JBarajas	9	05/27/2021
<input type="checkbox"/>	3060218	Basurto-Gonzalez, Joel	JBasurto-Gonzal	11	05/21/2021
<input type="checkbox"/>	3060189	Beas, Daniel	DBeas	9	03/18/2021
<input type="checkbox"/>	2389723	Becerra, Madison	MBecerra	10	10/30/2020
<input type="checkbox"/>	3060105	Becerra, Trinity	TBecerra	9	05/21/2021

The Agricultural Experience Tracker

<input type="checkbox"/>	Unique #	Name	Username	Grade	Last Access
<input type="checkbox"/>	3060106	Blanton, Anthony	ABlanton	9	05/26/2021
<input type="checkbox"/>	2904316	Brambila, Rigoberto	RBrambila	10	12/11/2020
<input type="checkbox"/>	2383578	Brambila, Yulissa	YBrambila	11	02/09/2021
<input type="checkbox"/>	3060107	Camarena, Jenayah	JCamarena	9	05/06/2021
<input type="checkbox"/>	2385115	Cardenas, Raul	RCardenas	10	11/05/2020
<input type="checkbox"/>	3060108	Carranza, Jennifer	JCarranza	9	05/21/2021
<input type="checkbox"/>	2941864	Castillo, Madison	MCastillo	9	12/10/2020
<input type="checkbox"/>	3060219	Castro, Adrian James	ACastro1	11	05/13/2021
<input type="checkbox"/>	3060297	Castro-Angeles, Guadalupe	GCastro-Angeles	10	05/24/2021
<input type="checkbox"/>	3060333	Ceja-Robles, Fabian	FCeja-Robles	9	05/28/2021
<input type="checkbox"/>	2941871	Cerde, Damian	DCerde	9	12/14/2020
<input type="checkbox"/>	2942349	Cervantes, Francisco	FCervantes	9	12/10/2020
<input type="checkbox"/>	2949587	Cervera-Espinoza, Stephanie	SCervera-Espino	10	12/10/2020
<input type="checkbox"/>	3060220	Chavarin-Ortega, Manuel	MChavarin-Orteg	11	05/27/2021
<input type="checkbox"/>	2389661	Chavez, Omar	OChavez	10	12/16/2020
<input type="checkbox"/>	2389660	Contreras, Saul	SContreras	10	12/11/2020
<input type="checkbox"/>	2384765	Corella, Athena	ACorella	10	05/13/2021
<input type="checkbox"/>	2942371	Cornejo, Jazmyn	JCornejo	9	12/14/2020
<input type="checkbox"/>	2949591	Coronel, Precilla	PCoronel	10	02/09/2021
<input type="checkbox"/>	2941872	Correa-Vigil, Fernando	FCorrea-Vigil	12	12/10/2020
<input type="checkbox"/>	3060298	Cortes-Zavala, Gabriela	GCortes-Zavala	10	05/25/2021
<input type="checkbox"/>	2949595	Cruz-Garcia, Benjamin	BCruz-Garcia	11	never
<input type="checkbox"/>	3060058	Cuevas- Aguilar, Cynthia	CCuevas-Aguilar	9	05/26/2021
<input type="checkbox"/>	2949598	Cunningham, Robert	RCunningham	10	12/10/2020
<input type="checkbox"/>	2388657	De La Torre, Ben	BDeLaTorre	10	11/04/2020
<input type="checkbox"/>	3060109	Delgadillo, Luis	LDelgadillo	9	05/21/2021
<input type="checkbox"/>	3060059	Diaz, Ariana	ADiaz	9	05/26/2021
<input type="checkbox"/>	3060190	Diaz, Ayasha	ADiaz1	9	05/24/2021
<input type="checkbox"/>	2904322	Diaz, Gerardo	GDiaz	10	12/11/2020
<input type="checkbox"/>	3060334	Diaz, Jose	JDiaz	11	02/10/2021
<input type="checkbox"/>	3060191	Diaz, Raquel	RDiaz	9	05/26/2021
<input type="checkbox"/>	2949600	Diaz-Bernal, Vanessa	VDiaz-Bernal	10	12/10/2020
<input type="checkbox"/>	2942372	Diaz-Cervantes, Jocelyn	JDiaz-Cervantes	10	11/06/2020
<input type="checkbox"/>	2949612	Diaz-Mejia, Christian	CDiaz-Mejia	10	12/10/2020
<input type="checkbox"/>	2389666	Drummer, Nevaeh	NDrummer	10	12/11/2020
<input type="checkbox"/>	2394256	Duenas, Juan	JDuenas	10	12/11/2020
<input type="checkbox"/>	2942373	Duff, Michael	MDuff	11	12/14/2020
<input type="checkbox"/>	2389634	Duran, Rocio	RDuran	10	02/09/2021
<input type="checkbox"/>	2388765	Duron, Annette	ADuron	10	12/14/2020
<input type="checkbox"/>	2383575	Edwards, Irie	IEdwards	11	11/05/2020

The Agricultural Experience Tracker

<input type="checkbox"/>	Unique #	Name	Username	Grade	Last Access
<input type="checkbox"/>	2941875	Edwards, Rylynn	REdwards	9	02/09/2021
<input type="checkbox"/>	3060192	Elias Jaramillo, Yarlecsi	YEliasJaramillo	9	05/26/2021
<input type="checkbox"/>	3060299	Emerson, Nathan	NEmerson	10	05/24/2021
<input type="checkbox"/>	3060300	Ervin, Dominick	DErvin	10	05/26/2021
<input type="checkbox"/>	3060060	Escobedo, Ivan	IEscobedo	9	05/27/2021
<input type="checkbox"/>	2389667	Espinoza, Yaretza	YEspinoza	10	05/25/2021
<input type="checkbox"/>	2384998	Fehn, Nelly	NFehn	10	05/13/2021
<input type="checkbox"/>	2949616	Figueroa, Christian	CFigueroa	10	12/17/2020
<input type="checkbox"/>	2949618	Findley, Amanda	AFindley	10	02/09/2021
<input type="checkbox"/>	2941877	Flor, Adriana	AFlor	11	12/10/2020
<input type="checkbox"/>	2988132	Flor, Elizabeth	EFlor	11	12/18/2020
<input type="checkbox"/>	3060221	Flores, Damian	DFlores	9	05/27/2021
<input type="checkbox"/>	2941883	Flores-Sanchez, Ernulfo	EFlores-Sanchez	11	11/04/2020
<input type="checkbox"/>	2389070	Francis, Kaitlyn	KFrancis	10	02/09/2021
<input type="checkbox"/>	2388556	Fulgencio, Guadalupe	GFulgencio	10	12/14/2020
<input type="checkbox"/>	3060222	Gaeta, Evelynna	EGaeta	11	05/13/2021
<input type="checkbox"/>	2949621	Garcia, Adrian	AGarcia10	10	10/30/2020
<input type="checkbox"/>	2175000	Garcia, Aldo	AGarcia3	11	12/10/2020
<input type="checkbox"/>	3060193	Garcia, Angelina	AGarcia1	9	05/07/2021
<input type="checkbox"/>	2941885	Garcia, Carlos	CGarcia	11	12/10/2020
<input type="checkbox"/>	2384495	Garcia, David	DGarcia	10	04/15/2021
<input type="checkbox"/>	3060223	Garcia, Gabriella	GGarcia1	11	05/27/2021
<input type="checkbox"/>	2949624	Garcia, Isabella	IGarcia	10	02/09/2021
<input type="checkbox"/>	2942376	Garcia, Joshua	JGarcia	9	12/10/2020
<input type="checkbox"/>	3060110	Garcia, Marissa	MGarcia1	9	05/25/2021
<input type="checkbox"/>	2383918	Garcia, Martin	MGarcia	11	12/09/2020
<input type="checkbox"/>	3060194	Garcia, Nazai	NGarcia	9	05/26/2021
<input type="checkbox"/>	3060224	Garcia, Nicolas	NGarcia1	11	05/27/2021
<input type="checkbox"/>	3081351	Garcia, Oliver	OGarcia	10	03/16/2021
<input type="checkbox"/>	2532205	Garcia, Valeria	VGarcia	11	12/10/2020
<input type="checkbox"/>	3060195	Garcia Perez, Camila	CGarciaPerez	9	05/27/2021
<input type="checkbox"/>	2388580	Garcia Perez, Maria	MGarciaPerez	10	12/17/2020
<input type="checkbox"/>	3060111	Garcia-Aguilar, Hailey	HGarcia-Aguilar	9	05/21/2021
<input type="checkbox"/>	3060061	Garis, Anaya	AGaris	9	05/07/2021
<input type="checkbox"/>	3060062	Garnica, Abigail	AGarnica	9	05/28/2021
<input type="checkbox"/>	3060063	Godoy Fernandez, Abigail	AGodoyFernandez	9	05/24/2021
<input type="checkbox"/>	2941893	Gonzales-Medina, Luis	LGonzales-Medin	11	12/10/2020
<input type="checkbox"/>	2949627	Gonzalez, Adrian	AGonzalez	10	12/15/2020
<input type="checkbox"/>	3060301	Gonzalez, Garazi	GGonzalez	10	05/13/2021
<input type="checkbox"/>	3060112	Gonzalez, Jose Angel	JGonzalez1	9	05/24/2021

The Agricultural Experience Tracker

<input type="checkbox"/>	Unique #	Name	Username	Grade	Last Access
<input type="checkbox"/>	2941894	Gonzalez, Juan	JGonzalez	11	12/10/2020
<input type="checkbox"/>	2385073	Gonzalez Oliva, Enrique	EGonzalezOliva	10	12/18/2020
<input type="checkbox"/>	2941895	Goodman, Xavier	XGoodman	11	12/10/2020
<input type="checkbox"/>	3060113	Govea, Gionni	GGovea	9	05/21/2021
<input type="checkbox"/>	3060114	Guerra, Pamela	PGuerra	9	05/26/2021
<input type="checkbox"/>	2949628	Guerra-Guerrero, Benigno	BGuerra-Guerrer	10	12/17/2020
<input type="checkbox"/>	3060335	Guevarra, Ian Tristan	IGuevarra	11	05/13/2021
<input type="checkbox"/>	2388788	Guijarro, Saul	SGuijarro	10	02/09/2021
<input type="checkbox"/>	3060302	Guillen-Real, Emiliano	EGuillen-Real	10	05/25/2021
<input type="checkbox"/>	2532214	Hampton, Tanner	THampton	10	05/13/2021
<input type="checkbox"/>	2942402	Haro, Angel	AHaro	9	12/10/2020
<input type="checkbox"/>	2942403	Hernandez, Clarisa	CHernandez	11	12/10/2020
<input type="checkbox"/>	2904323	Hernandez, Eileen	EHernandez	10	11/06/2020
<input type="checkbox"/>	3060304	Hernandez, Gael	GHernandez	10	05/21/2021
<input type="checkbox"/>	3060115	Hernandez, Max	MHernandez	9	05/28/2021
<input type="checkbox"/>	2941898	Hernandez-Torres, Israel	IHernandez-Torr	9	11/06/2020
<input type="checkbox"/>	2941900	Hurtado, Jessica	JHurtado	11	11/06/2020
<input type="checkbox"/>	2942405	Ibarra-Franco, Alondra	Albarra-Franco	9	11/06/2020
<input type="checkbox"/>	3060116	Jarrett, Jonathan	JJarrett	9	05/21/2021
<input type="checkbox"/>	2942406	Jaurrieta, Genaro	GJaurrieta	9	12/10/2020
<input type="checkbox"/>	2941901	Juarez-Raya, Michael	MJuarez-Raya	11	12/11/2020
<input type="checkbox"/>	2942410	Kohara, Jeremiah	JKohara	11	12/10/2020
<input type="checkbox"/>	3060225	Lambert, Rylyn	RLambert	10	02/05/2021
<input type="checkbox"/>	2028529	Lara, Carlos	CLara	11	02/10/2021
<input type="checkbox"/>	2906538	Lemmon, Makayla	MLemmon	9	05/26/2021
<input type="checkbox"/>	2949631	Leyva, Jimmy	JLeyva	11	05/26/2021
<input type="checkbox"/>	2388477	Lezama, Abelardo	ALezama	10	11/05/2020
<input type="checkbox"/>	3060196	Li, Alex	ALi	10	05/21/2021
<input type="checkbox"/>	3060336	Lizaola Mejia, Christian	CLizaolaMejia	11	05/26/2021
<input type="checkbox"/>	3060197	Lizaola Mejia, Daniela	DLizaolaMejia	9	05/26/2021
<input type="checkbox"/>	3060064	Lockard, Evan	ELockard	9	05/26/2021
<input type="checkbox"/>	2388535	Lopez, Alexandra	ALopez	10	12/11/2020
<input type="checkbox"/>	3060198	Lopez, Emily	ELopez	9	05/24/2021
<input type="checkbox"/>	3060199	Lopez, Leah	LLopez	9	05/25/2021
<input type="checkbox"/>	2384503	Lopez, Sarah	SLopez	10	12/11/2020
<input type="checkbox"/>	3060200	Lopez Fernandez, Alfonso	ALopezFernandez	9	05/26/2021
<input type="checkbox"/>	3060201	Lopez-Garcia, Alexis	ALopez-Garcia	9	02/09/2021
<input type="checkbox"/>	2942511	Lopez-Mora, Gissel	GLopez-Mora	11	11/05/2020
<input type="checkbox"/>	2941903	Loredo, Nathan	NLoredo	11	11/06/2020
<input type="checkbox"/>	2389657	Loya, Daniel	DLoya	10	11/06/2020

The Agricultural Experience Tracker

<input type="checkbox"/>	Unique #	Name	Username	Grade	Last Access
<input type="checkbox"/>	3060226	Maldonado, Marcus	MMaldonado	11	03/16/2021
<input type="checkbox"/>	3060227	Maravilla, Maya	MMaravilla	9	05/13/2021
<input type="checkbox"/>	3060337	Marquez, Richard	RMarquez	11	05/26/2021
<input type="checkbox"/>	2942516	Marquez-Perez, Juan	JMarquez-Perez	10	12/17/2020
<input type="checkbox"/>	3060117	Martin, Isaac	IMartin	9	05/26/2021
<input type="checkbox"/>	3060305	Martin Del Campo Carrillo, Alan Santiago	AMartinDelCampo	10	05/24/2021
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<input type="checkbox"/>	3060306	Martinez-Bravo, Andrea	AMartinez-Bravo	10	05/24/2021
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<input type="checkbox"/>	2389664	Mejarada Garcia, Monserrat	MMejaradaGarcia	10	12/18/2020
<input type="checkbox"/>	2388777	Mena, Betzi	BMena	10	12/17/2020
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<input type="checkbox"/>	3060065	Mendoza, Jayden	JMendoza	9	05/26/2021
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<input type="checkbox"/>	3060120	Obas, Mateo	MObas	9	05/21/2021
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The Agricultural Experience Tracker

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<input type="checkbox"/>	3060204	Ortiz Gonzalez, Gabriela	GOrtizGonzalez	9	05/21/2021
<input type="checkbox"/>	2942951	Ortiz-Gonzalez, Osvaldo	OOrtiz-Gonzalez	11	12/10/2020
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<input type="checkbox"/>	2388793	Ramos Rogel, Jose Daniel	JRamosRogel	10	12/14/2020
<input type="checkbox"/>	2915419	Ray, Ian	IRay	9	never
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<input type="checkbox"/>	2385171	Reyes, Liliana	LReyes	10	02/09/2021
<input type="checkbox"/>	3060345	Reyes, Moises	MReyes	11	05/24/2021
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<input type="checkbox"/>	2384497	Rodriguez, Brian	BRodriguez	10	12/11/2020
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<input type="checkbox"/>	2942956	Rodriguez, Melanie	MRodriguez0	11	02/09/2021
<input type="checkbox"/>	3060125	Romero, Steven	SRomero	9	03/19/2021
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<input type="checkbox"/>	2385074	Ruano, Abrianna	ARuano15	10	05/25/2021
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<input type="checkbox"/>	2388616	Santos Nava, Alexi Desteny	ASantosNava	10	12/14/2020
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<input type="checkbox"/>	3060348	Silk, Jade	JSilk	11	05/25/2021
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<input type="checkbox"/>	3060209	Tejeda Jr, Christian	CTejedaJr	9	05/21/2021
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<input type="checkbox"/>	2904373	Valencia, Julian	JValencia	10	12/15/2020
<input type="checkbox"/>	3060236	Vanderpool, Mathew	MVanderpool	11	05/27/2021

The Agricultural Experience Tracker

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<input type="checkbox"/>	2389659	Vargas, Rafael	RVargas	10	12/10/2020
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<input type="checkbox"/>	2941973	Vera, Phillip	PVera	11	10/30/2020
<input type="checkbox"/>	3060351	Villarreal-Urbano, Erick	EVillarreal-Urb	10	05/13/2021
<input type="checkbox"/>	3060237	Zambrano-Medrano, Alexis	AZambrano-Medra	9	05/21/2021
<input type="checkbox"/>	2941974	Zaragoza, Luis	LZaragoza	11	11/05/2020
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<input type="checkbox"/>	3060238	Zepeda, Stephanie	SZepeda	11	05/24/2021

10656 | Monday, June 7, 2021

SSP Rancho San Juan High School/Agricultural Technology and Seed Science

Author: Janice Souza

First Authored: January 08, 2019

Last Revised: April 17, 2020

Introduction

The success of the agricultural industry depends on good quality seed. The progress in agriculture depends upon production and marketing of good, quality seed of high yielding varieties. This course is the first course in this pathway that involves seed production and technology. This integrated course combines an interdisciplinary approach to laboratory science and research with seed science and technology principles. Using the skills and principles learned in this course, students design experiments to solve issues involving seed science and technology currently facing the industry. Through job shadowing with local seed industry companies, students will have the ability to expand the skills they acquire in the classroom to real-world situations to implement skills demanded by both colleges and careers. The course culminates with an agriculture experimental research project in which students design and conduct an experiment to solve a relevant issue. Final projects will be eligible for the Career Development Event competition at FFA events. Throughout the course, students will be graded on participation in intracurricular FFA activities, as well as the development and maintenance of an ongoing Supervised Agricultural Experience (SAE) program.

Course Information

Industries/Pathway

- Agriculture & Natural Resources

General Information

In Class: 180

Dual Enrollment: yes

Is course reviewed for duplication with other LEA?: no

If duplication, was the notification process followed?: no

Articulation: yes

Related Occupations:

Crop Science Production Manager

Nursey Manager

Plant Breeder

Seed Technician

Agronomist

Seed Technology (priming and pelleting services)

O*NET Occupations

- Agricultural Workers, All Other, Biological Technicians, Farmworkers and Laborers, Crop, Farmworkers and Laborers, Crop, Nursery, and Greenhouse, Nursery Workers, Pesticide Handlers, Sprayers, and Applicators, Vegetation, Soil and Plant Scientists, Biological Scientists, All Other, Chemists, Geneticists, Life, Physical, and Social Science Technicians, All Other, Quality Control Analysts

curriculum::common.heading.standards

-
- Research the scope of career opportunities available and the requirements for education, training, certification, and licensure.
-
- Recognize the role and function of professional organizations, industry associations, and organized labor in a productive society.
-
- Solve predictable and unpredictable work-related problems using various types of reasoning (inductive, deductive) as appropriate.
-
- Identify and ask significant questions that clarify various points of view to solve problems.
-
- Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.
-

- Interpret information and draw conclusions, based on the best analysis, to make informed decisions.
-
- Demonstrate the use of appropriate tools and technology used in the Agriculture and Natural Resources sector.
-
- Discern the quality and value of information collected using digital technologies, and recognize bias and intent of the associated sources.
-
- Use electronic reference materials to gather information and produce products and services.
-
- Employ Web-based communications responsibly and effectively to explore complex systems and issues.
-
- Research past, present, and projected technological advances as they impact a particular pathway.
-
- Use information and communication technologies to synthesize, summarize, compare, and contrast information from multiple sources.
-
- Make observations of plants and animals to compare the diversity of life in different habitats.
-
- Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.
-
- Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.
-
- Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.
-

- Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy.
-
- Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individuals' probability of surviving and reproducing in a specific environment.
-
- Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.
-
- Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.
-
- Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment.
-
- Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait.
-
- Construct an explanation based on evidence for how natural selection leads to adaptation of populations.
-
- Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.
-
- Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.
-
- Analyze data from tests of an object or tool to determine if it works as intended.
-

- Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions.
-
- Analyze data using tools, technologies, and/or models (e.g., computational, mathematical) in order to make valid and reliable scientific claims or determine an optimal design solution.
-
- Apply concepts of statistics and probability (including determining function fits to data, slope, intercept, and correlation coefficient for linear fits) to scientific and engineering questions and problems, using digital tools when feasible.
-
- Analyze data using computational models in order to make valid and reliable scientific claims.
-
- Evaluate questions that challenge the premise(s) of an argument, the interpretation of a data set, or the suitability of a design.
-
- Ask questions that arise from examining models or a theory to clarify relationships.
-
- Analyze complex real-world problems by specifying criteria and constraints for successful solutions.
-
- Demonstrate the various techniques for successful plant propagation (e.g., budding, grafting, cuttings, and seeds).
-
- Explain the different forms of sexual and asexual plant reproduction.
-
- Use the proper sterile technique used in tissue culture.
-
- Communicate the differences between, and uses of, native and nonnative plants.
-
- Practice how to identify plants by using a dichotomous key.
-
- Classify and identify plants by order, family, genus, and species.

-
- Distinguish the differences between monocots and dicots.
-
- Demonstrate how common plant parts are used to classify the plants.
-
- Summarize plant inheritance principles, including the structure and role of DNA.
-
- Recognize the part of the cell that is responsible for the genetic information that controls plant growth and development.
-
- Compare differences between prokaryotic cells and plant and animal eukaryotic cells and how viruses differ from them in complexity and general structure.
-
- Test plant cellular function reactions when plants are grown under different conditions.
-
- List which organelles in plant cells carry out photosynthesis.
-
- Assess how herbicide-resistant plant genes can affect the environment.
-
- Compare and contrast the effects of agricultural biotechnology, including genetically modified organisms, on the agriculture industry and the larger society and the pros and cons of such use.
-
- Research how changing technology, such as micro-propagation, biological pest controls, and genetic engineering (including DNA extraction and gel electrophoresis), affects plant production, yields, and management.
-
- Communicate how genetic engineering techniques have been used to improve crop yields.
-
- Explain the various technology advancements that affect plant and soil science, such as global positioning systems, global information systems, variable rate technology, and remote sensing.
-

- Understand soil types, soil texture, structure, and bulk density and explain the U.S. Department of Agriculture (USDA) soil-quality rating procedure.
-
- Conduct experiment(s) testing the factors that affect plant growth and predict plant response.
-
- Discern how primary, secondary, and trace elements are used in plant growth.
-
- Label the seed's essential parts and describe their functions.
-
- Investigate plant systems, nutrient transportation, and energy storage.
-
- Research the factors that influence plant growth, including water, nutrients, light, soil, air, and climate.
-
- Identify the tissues seen in a cross section of woody and herbaceous plants.

Competencies / Outcomes

Upon the completion of this course students should be able to:

1. Describe how seeds are formed, the basic parts of seeds, and the different types of seeds.
2. Explain the factors that affect seed formation and developments.
3. Summarize the main events that occur during germination and factors that influence it.
4. Compare and contrast different types of seed dormancy, the causes, and methods of breaking them.
5. Analyze the methods of determining seed quality.
6. Comprehend the physiological aspects of seed discoloration, seed moisture relation, and the relationships with storability.
7. Evaluate the importance of certified seeds, organic seeds, and aspects of seed marketing.

Units

Introduction to Seed Science and Technology

This introductory unit will introduce students to the disciplines in seed science and technology. In addition, this unit will focus on proper methods of agriscience inquiry. Through a series of mini-labs experiences

based on the course content, students will learn to ask questions and define problems, conduct research to form a hypothesis, determine the experimental design and conduct experimentation, analyze and interpret data, develop conclusions, and then communicate their findings in lab reports. Not only will the students learn to utilize proper scientific method protocol through conducting these mini-labs, they will also learn what topics will be taught throughout the year in order to guide them in selecting the problems/questions for their individual Agriscience Project. Through these mini-labs experiences and unit content, students will be provided with the skills and knowledge to successfully establish the idea they will pursue in their Agriscience Project. By the end of this unit, students will complete the Agriscience Project Research Proposal for their on-going science experiment that will be conducted through the first semester of the course.

Lesson

What is Seed Science and Technology

Seed Science and Technology is the science dealing with methods of improving physical and genetical characteristics of seed. This unit will introduce seed science and technology and the area of concentration included in producing and improving seed quality.

Students will work in pairs to choose a division to conduct a more in-depth research to learn more about each division within the Seed Science and Technology industry. Included in their research, students will be able to explain the purpose the division serves to the industry, tasks performed and perhaps how those tasks are performed, the benefits to the industry, qualifications necessary to be hired, career opportunities and salary range.

Students will then create a multimedia presentation to introduce their particular division of seed science and technology to the class and identify the most prevalent issues facing their division of interest.

Resources

Introduction to Seed Science and Technology

Lesson

Reviewing the Scientific Method

The scientific method is the basis for all scientific decisions and will be reviewed in this lesson.

Students will research the differences between open-pollinated, heirloom, and hybrid broccoli seeds as it applies to germinating broccoli varieties. Students will hypothesize germination rates between three varietal groups. Students will then design and implement an experiment incorporating quantitative data collection.

The viable plants will be maintained for future study.

Resources

Seed industry Terminology

Lesson

Taxonomy and Using the Dichotomous Key

Students will be introduced to taxonomy as a type of classification that uses similarities of organisms and species.

After learning the parts of the plant including roots, stem, leaves, and flower(I would highly recommend iCEV lessons for certification Bayer Plant Science), students will be taught and will then apply the binomial nomenclature used by Carl Linnaeus to create a dichotomous key.

Binomial nomenclature and common names will be used throughout this course in the same manner as they are used in the seed industry.

Resources

Seed Science Industry Career Research

Lesson

Comparing Monocot and Dicots: Angiosperms versus Gymnosperms

In this assignment, students will explain the difference between angiosperms and gymnosperms.

Concentrating on angiosperms, students will apply what they have learned in previous lessons to differentiate the two classes of angiosperms: monocotyledons (monocots) and dicotyledons (dicots).

In a mini-lab, students will compare a monocot plant to a dicot plant concentrating on the root system, leaf structure, and flowers (if available) of each plant.

Vascular bundles will be observed microscopically to compare the vascular bundle arrangement of each plant.

Resources

Seed science research presentation ruric

Lesson

Soil Texture and Fertility

This lesson will introduce and instruct students how to use the soil texture triangle.

This lesson and resources comes from ASC2.06, ASC2.11, and ASC2.012. Students will know and be bale to use the soil triangle to distinguish between different types of soil through guided practice.

Resources

The Scientific Method in Seed Science

Resources

Practice with Qualitative and Quantitative Observations Worksheet

Resources

Hypothesize Germination Rates of Broccoli Seeds

Resources

Hypothesize Germination Rates of Broccoli Seeds Teacher guide

Resources

Territorial Seed Company

Resources

Practice with Binomial Nomenclature

Resources

Practice with Binomial Nomenclature Key

Resources

Dichotomous Key Activity

Resources

Candy Dichotomous Key Activity

Resources

Making Your Own Dichotomous Key

Resources

Plant Dissection Mini-Lab Worksheet

Resources

Angiosperms Versus Gymnosperms

Resources

Angiosperms Versus Gymnosperms Worksheet

Resources

Soil Texture Triangle

The Nature of Soil

Students will use the methods of scientific inquiry developed in the previous units to investigate the composition of the physical world and discover how matter and energy change forms through biogeochemical cycles. Students will understand where soil originates by investigating the role of the rock cycle in soil formation. Students will learn how the electron configuration of different elements present in the parent material give them unique physical and chemical properties give them unique physical and chemical properties, and will further investigate how these properties impact soil characteristics. Students will identify how the climate, weather, and the environment impact the soil properties and will examine the role erosion plays in soil science and its affects as a plant growing media. Students will collect soil samples from a variety of sources, and will use industry methods to determine the chemical composition of the soil and how the composition.' affects its physical and chemical characteristics. Students will connect to prior knowledge of life science by looking at how biotic factors impact soil type, composition and texture through investigation and experimentation. Students will use the results of their soil map of their local area and determine the best crops for their soil type.

Lesson

Properties of Matter

In this lesson, students will define physical property, chemical property, physical change, and chemical change.

Students will describe the phases of matter, as well as labeling properties and changes as physical or chemical.

Resources

Mixtures, Elements, and compounds PowerPoint

Lesson

Electrons and the Periodic Table

Students learn that all matter is composed of extremely small parts called atoms.

Students learn that each atom has unique properties, depending upon the number and arrangement of the subatomic particles within it.

Students also discover that there is an orderly progression from the lightest to heaviest atoms and that this pattern is organized on the Periodic Table of Elements.

Finally, students will complete assignments where they will be able to describe how electrons are organized for the first 20 elements and to identify and model valence electrons.

Resources

Mixtures, Elements and Compound Notes

Lesson

Atomic Model

Using the Bohr model template, students will work in teams to make a model of hydrogen, helium, beryllium, and boron. They will be encourage to notice any pattern and will be introduced to atomic mass.

Students will be able to describe the structure of atoms, including the masses, electrical charges, and locations of protons, neutrons, and electrons and they will be able to identify that protons determine an elements identity.

Resources

Periodic Table Packet 1

Resources

Atoms Family Worksheet

Lesson

Rock Cycle

In this lesson students will follow a rock as it travels through a rock cycle.

Students will model the movements of earth materials by rolling a die to see where they go next. Students should be familiar with characteristics and formation of sedimentary, metamorphic, and igneous rocks through guided instruction.

Lesson

Soil Formation

Students will be introduced to how soils are formed through parent materials and physical and chemical processes.

Students will understand and apply the basic components and processes which will help to create an understanding of how soil is made; the basic components of soil, and the process of weathering and erosion.

Resources

Atomic Basics

Lesson

Soil Texture and Fertility

This lesson will introduce and instruct students how to use the soil texture triangle.

This lesson and resources comes from ASC2.06, ASC2.11, and ASC2.012. Students will know and be able to use the soil triangle to distinguish between different types of soil through guided practice.

Resources

Rock Cycle Slides

Resources

Rock Cycle Game

Lesson

Ions and Soil Chemistry

Students will be able to model how atoms become ions by gaining or losing electrons. Students will be able to test a soil's plant growth capabilities.

Students will understand atoms become positively charged when they lose electrons and they become negatively charged when they gain electrons and that whether an atom is likely to become positive or negative depends on its valence electrons. Students will use a model to show what happens to an atom's valence electrons when the ion becomes ionized.

After learning what chemical characteristics of soil are commonly tested, what reactions occur in the testing process, and how these tests are performed, students will carry out industry standard tests to determine chemical characteristics, such as pH, nitrogen levels, potassium levels, phosphorus levels, and the presence of micro-nutrients.

Lesson

Designing an Experiment and Analyzing Data

Students will determine the methods for organizing the data from their year-long agriscience project by creating data tables.

Students will use mathematical principles to synthesize their data calculating a mean. Furthermore, a statistical analysis of the data will help the students determine if the results are due to chance or the independent variable that was tested. Students will choose the best way to present their data using graphs they believe will most effectively demonstrate their findings; and they will further summarize what each graph shows.

Finally, student will interpret the data and formulate conclusions based on the results. In the written conclusion, students will use their data to either accept or reject the original hypothesis. Conclusions should be directly supported by the data and by previous research. Students will also identify the future studies that may be conducted that relate to the study at hand.

Resources

Sedimentary Rock Lab

Lesson

Physical Properties Lab

In this lab, students will learn how to test the physical characteristics that affect a soil's capabilities.

Students will be able to assess and amend a soil to achieve a specific agricultural application. Students will collect soil samples from a variety of locations around their community. Students will choose appropriate lab testing and safety equipment, and will carry out a battery of industry standard test to determine what physical characteristics the soil samples possess.

After receiving instruction in what physical properties of matter are measured in soil testing, students will use the ribbon test, and look at physical factors such as soil texture, composition, and particle size. Students will examine the soil for presence of living organisms, such as nematodes. Based on these properties, students will hypothesize what chemical elements are present in the solid.

Students will research what chemicals are prominent in the soil on their test areas, and check their hypothesis against their research. Students will turn in an annotated bibliography, and give details on

where their soil came from, the lab tests they performed, the results of the tests, their data analysis, and how that analysis compared to their research.

Resources

Soil Formation and Components Slides

Resources

Ion Slides

Resources

Soil Chem Notes Handout

Resources

Narrative Element Story

Resources

Soil Chem Notes

Resources

Cation-Anion Worksheet

Resources

Key Assignment Chemical Properties Lab

Resources

Variables In a Scientific Experiment

Resources

Agriscience Fair Project Prelim Idea

Resources

Soil Sampling Slides

Resources

Soil Sedimentation Test (tilth test)

Resources

Soil Studies

Resources

Doing the Math

Resources

Physical Properties Lab

Water, Macromolecules, and Plant Regulators

Using knowledge accessed from previous units on the physical and chemical properties of soil, students will analyze how the water cycle impacts soil based on its soil type (sand, silt, clay) soil location (geographic and topographic), vegetative state and natural slope of land in order to understand how water becomes available for plant growth. Students will explain the movement of water through soil with respect to how inter-molecular forces impact percolation, capillary action, pore size, cohesion, and adhesion.

Furthermore, students will explain the impact that soil has on the quality of their water and will use water analysis tests to determine the safe and appropriate levels for potable water. Students will also be able to provide solutions to possible contamination and/or toxic levels of residues/nutrients in the water samples. Included in this unit is the study of macromolecules where students will apply their knowledge of the chemistry of elements and their symbols to identify the molecular structure of carbohydrates, lipids, proteins, and nucleic acids. Students will be able to describe the primary function of these macromolecules and the importance of bonds that hold these structures together. Students will be able to identify these macromolecules as those stored in seeds. Finally students will identify several plant growth regulators that control growth, development, and movement in plants and Understand that plant growth regulators are necessary for, but do not control, many aspects of plant growth and development. They will be able to explain that the effect on plant physiology is dependent on the amount of hormone present and the tissue sensitivity to the plant growth regulator.

Lesson

Water Quality

In this lesson, students will learn about how the water cycle impacts soil and how to test for contaminants and nutrients.

Using knowledge accessed from previous units on the physical and chemical properties of soil, students will analyze how the water cycle impacts soil based on its soil type (sand, silt, clay) soil location (geographic and topographic), vegetative state and natural slope of land in order to understand how water becomes available for plant growth. Students will explain the movement of water through soil with respect to how inter-molecular forces impact percolation, capillary action, pore size, cohesion, and adhesion. Furthermore, students will explain the impact that soil has on the quality of their water and will use water analysis tests to determine the safe and appropriate levels for potable water.

Resources

Soil Water Lecture

Lesson

Macromolecules

In this lesson, students will learn about the different macromolecules and how to test if those macromolecules are present.

Students will apply their knowledge of the chemistry of elements and their symbols to identify the molecular structure of carbohydrates, lipids, proteins, and nucleic acids. Students will be able to describe the primary function of these macromolecules and the importance of bonds that hold these structures together. Students will be able to identify these macromolecules as those stored in seeds.

Resources

water cycle and runoff lecture

Lesson

Plant Growth Regulator

Students will learn different hormones within the plant that affect plant growth.

In this lesson students will identify the five main organic plant growth regulators, also referred to as hormones and their affect in normal plant growth. Students will combine the knowledge learned in this lesson with the scientific principles of experiments to design an experiment testing the effects plant growth regulators have on normal plant growth.

Resources

Lewis Dot Worksheet

Resources

Ionic Bond Worksheet

Resources

Water Quality Testing Lab

Resources

Macromolecule Lecture

Resources

Macromolecule student notes

Resources

Who Took Jerrell's IPOD

Resources

Teacher Prep Who Took Jerrell's IPOD

Resources

Macromolecule Lab

Resources

Plant Growth Regulators Lecture

Resources

Plant Growth Regulators Lecture Worksheet

Resources

Plant Growth Regulators Lab

Propagation and Seed Physiology

In this unit, students learn and apply research techniques and carry out reproduction projects in plants, which will enable them to understand that most plants reproduce sexually, but can be forced to reproduce asexually. At the end of this unit, students will be able to compare and contrast sexual reproduction, including uniform and diverse offspring, describe how genetic information is passed from one parent to offspring, describe the advantages and disadvantages of each type of reproduction, and explain how genetic information is altered through mutations. This unit is a very interactive and hands-on unit where the students will propagate several plants demonstrating sexual and asexual propagation.

Lesson

Germination Process

Students will learn and apply the germination process.

Students will learn that germination is a biochemical process that involves the activation of many chemical processes. This happens in three stages with the first stage involving the uptake of water call imbibition. The protein synthesis systems are activated and various enzymes are synthesized.

The second stage involves the breakdown of the stored energy rich compounds of the cotyledons and endosperm. The second stage is a period of readying the embryo for rapid growth during the third stage.

During the third stage of germination cell division begins and the embryo grows into a seedling.

Resources

The Germination Process PowerPoint

Lesson

Sexual Propagation

Students will review the parts of the flower and understand how angiosperms are propagated.

In this lesson, students will learn seeds are formed when a pollen grain lands on the stigma of the flower and sends down a pollen tube which releases a sperm cell into the ovule. This fertilization of the sperm cell ovule can form a cell called a zygote.

The zygote then develops into an embryo. The embryo along with the food storage organs, cotyledons and/or endosperm and the seed coat or testa make-up what is called a seed.

Resources

The Germination Process

Lesson

Grafting

Students will be able to demonstrate how asexually propagation of woody plants.

This lesson identifies grafting as an asexually method of propagation, one part of the stem (scion) is mechanically grafted to the rootstock.

Resources

Seed Dissection Activity

Resources

Sexual Propagation PowerPoint

Resources

Guidelines Emasculating and Pollinating Tomatoes

Resources

Grafting PowerPoint

Resources

Grafting Lab

Seed Quality

In this unit, students will use the seeds produced as a result of previous units to conduct seed quality tests to determine germination percentages, break dormancy, evaluate vigor, seed quality by observing seedling development. Students will be reintroduced to factors affecting germination, conditions for seed dormancy, and methods for breaking dormancy.

Lesson

Seed Quality: Germination

In this lesson, students will identify the factors necessary for seed dormancy in plant survival and describe what are viable seeds.

Students will perform the warm germination test to determine the ability of seed to properly germinate under favorable conditions.

Resources

Warm Germination Test Lab

Lesson

Seed Dormancy

Students will learn that seed dormancy is a condition in which viable plant seeds fail to germinate under optimal environmental conditions.

In this lesson, students will be able to identify the differences between primary and secondary dormancy and the ecological advantages of dormancy. Students will also learn the methods used to break dormancy, including scarification, stratification, vernalization, and hormonal.

Students will demonstrate four methods of breaking seed dormancy; stratification, light method, scarification, and water method.

Resources

Breaking Seed Dormancy Lab

Lesson

Seed Vigor

This lesson will simulate adverse growing conditions, similar to those that may occur in the field. Students will identify the vigor tests used in the industry.

Students will learn that vigor testing does not only measure the percentage of viable seed in a sample, it also reflects the ability of those seeds to produce normal seedling under less than optimum or adverse growing conditions.

Resources

Seed Vigor Lab

Lesson

Seed Evaluation

This lesson will introduce students on various methods used by the industry to improve seed quality and thereby, improve yields and plant quality.

Students will identify the methods used by the industry to improve seed quality including a number of seed technologies such as genetics, molecular biology, coating, pelleting, priming, and production of artificial seed.

Students will conduct germination and grow-outs. They will record the growth rates and evaluate the growing patterns of each form of enhancement.

Resources

Seed Evaluation Lab

Seed Drying and Storage

Students will learn the importance of seed drying as the reduction of seed moisture content to the recommended levels for seed storage. They will demonstrate several techniques which will not be detrimental to seed viability. In addition, students will understand that seed drying is a prerequisite for long time storage of seeds, keeping their viability. Finally, students will identify the factors of storing various seeds properly to maintain their viability and explain the process of seed deterioration.

Lesson

Seed Quality and Storage

In this lesson, students will learn the importance of storing seeds properly.

Students will learn the importance of storing seeds in a cool, dry location where temperatures and humidity is controlled. They will be able to explain the proper temperature, light, and humidity required for certain species of seeds. Students will identify seed storage problems and how to prevent issues.

Resources

Seed Quality and Storage Lecture

Resources

Seed Quality and Storage Student Notes



Title: Biology and Sustainable Agriculture

Length of Course: Full Year (2 semesters; 3 trimesters; 4 quarters) Subject Area –

Discipline: Laboratory Sciences (“d”) – Biology

UC Honors designation: No

CTE Sector: Agriculture and Natural Resources

CTE Pathway: Agriscience

Grade Level(s): 9-12

Prerequisite(s): Algebra 1 or IM 1

Overview:

Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our environment. Sustainability creates and maintains the conditions under which humans and the biotic world can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations. Sustainability is important to making sure that we have and will continue to have, the water, materials, and resources to protect human health and our environment. (adapted from <http://www.epa.gov/sustainability/basicinfo.htm>)

Sn.

Course Content:

Unit 1: Driving Question: What is sustainable agriculture?

This introductory unit will focus on the biological classifications of agriculture and their associated industry sectors, what sustainability is, and how the scientific method is the driving force behind advancements and developments in sustainable biological practices within agriculture. Students develop an overview of agricultural industries and biologic practices through research projects on facets of California agriculture, and identify what sustainability and sustainable practices are through individualized lab experiments relating to current practices. Ultimately, students will be able to use the scientific method to complete an extensive laboratory experiment that is designed to evaluate potential feed source varieties for sustainable success within their local community.

Unit 1: Key Assignments

1. “What is sustainable agriculture?”

Students groups will research the various biological divisions of what constitutes agriculture (plant science, animal science, forestry, horticulture, etc.). Within their research they will identify the subcategories of industry that fall within their topic, what career paths are available within each, what are currently identified as “best practices” (such as the three E’s of sustainability -- economics, ecology and equity) and what are some of the sustainability issues and biologic concerns within each of these divisions. Students will then develop a multimedia presentation to introduce their particular area of agriculture to the class and identify the most prevalent issues facing their particular field of interest.

2. “That’s Ag - The Science Behind Agriculture” – Categorical Based Mini-Labs:

Student groups will design and complete an inquiry based mini-lab experiment to expand on their knowledge of the particular industry sector they researched from the previous activity. Choosing a focus from one of the areas of concern or issues within their sector, students will then design and implement an experiment that tests factors contributing to the issue and potential impacts they have on the population using scientific method learned in class. Examples might include a lab on animal production and energy flow, a lab on soil degradation and plant germination, a lab on food processing practices, a lab on post-harvest preservation, etc. The labs will introduce the application of inquiry within the agriculture sectors and the importance of the implementation of research in the industry. Design protocols, data, and analysis will be submitted in lab report format. As part of their analysis, students must use their data to make suggestions on how to improve efficiency or yield, or lessen the impact of processing, relevant to their finding of their particular experiment.

3. Scientific Method and Sustainability Lab – “Work Like a Scientist”

In this lab students are introduced to the scientific method, the basis for all scientific decision making. The native grasses research will provide students with the foundation of scientific investigation application as well providing key research that will be used in the final unit project as well as the end of course project. Students will research the difference between native grasses versus invasive grasses including specific species. Using this knowledge they will hypothesize germination rates between these two variable groups. Students will then design and implement an experiment incorporating quantitative data collection, analysis, and draw conclusions reflective to their hypothesis, and evaluate the grasses for potential sustainability within their communities.

As a continuation of the germination experiment, given that the two variables have differing germination rates, students can identify other measures of “success” of a potential feed crop. They will then sample the community environment for the potential factors affecting the continued growth and development of grasses. Samples would include soil testing, (pH, nutrient composition, structure and texture, and water capacity), water availability, and ambient temperatures. Combining this information with the initial background research regarding natives versus invasive, students will hypothesize on the continued success of their germinating grasses, then transplant their seeds into test plots or fodder trays, and allow for continued growth. After a predetermined amount of time, sample plots will be analyzed for percent coverage and measurements of species biomass will be completed. Using this information

students will determine the most biologically suitable grass species to plant that would be the most sustainable within the local community through a written lab completed in their lab notebook and a powerpoint presentation of their hypothesis, design, data and conclusion.

Unit 2: Driving Question: How does sustainable agriculture fit into our environment?

While unit one examined whole systems, unit two takes a closer look at components within that system. Students will use evidence gathered from a series of laboratory exercises to be able to describe the transfer of energy from one trophic level to another as well as the cycling of nutrients and energy through ecosystems. Students will be able to draw conclusions about these biogeochemical cycles and how they apply to sustainability of production agriculture. Specifically, students will conduct primary research in the areas of photosynthesis and chemical energy creation, nutrient cycling, transpiration and water use, ecological relationships and global farming practices in order to draw biologically-sound conclusions regarding the effects of agriculture on the natural environment. The students learning will culminate in a synthesis of concepts applied to the development of a three year sustainable crop rotation plan.

Unit 2: Key Assignments

1. “Bacteria at Work” - Nitrogen Fixation

Students will analyze the effects of nitrogen fixation on plants initially by examining prior studies as well as industry publications regarding the role of nitrogen in plant growth and the methods by which farmers enhance nitrogen levels in soil. This should include a thorough look at the microbiology of nitrogen-fixing bacteria, plant and root physiology, nutrient cycling and uptake in plants, chemical processes and cellular respiration in plants and fertilization methods. After garnering that background information, students will conduct an experiment that compares the effects of added nitrogen fertilizer versus nitrogen fixing bacteria on the growth of clover. Students will grow clover plants in soil with no nitrogen added, in soil with nitrogen fertilizer added, and in soil containing nitrogen-fixing bacteria (in this case, a species of rhizobia called *Rhizobium leguminosarium*, or *R. leguminosarium*). Students will monitor the nitrogen levels in each type of soil using a nitrogen testing kit. The students will observe the effects of nitrogen on the health of the clover plants by measuring the increase in biomass of each plant during the experiment. Plants should be harvested, soil washed away, and weights taken on plant material produced. Students will use the data collected to create a graph showing the relationship between nitrogen availability in the soil and crop sustainability. This allows students to not only experience agriculture’s role in the nitrogen cycle, but also provides necessary supporting data for decision making in the final end of course project.

2. “Morning Jolt!”- Photosynthesis Lab

Photosynthesis is the basis for the creation of chemical energy in the natural world. Plants require light in order to transform one type of energy into another, and the quantity and type of light determine the optimal photosynthesis rates. Students will conduct a laboratory exercise that examines the effects of shade on the growth of plants and the rates of photosynthesis and will develop a written memorandum to the International Coffee Growers Association regarding

optimal shade levels for the growth of coffee trees, including information regarding ecological sustainability involved in the practice. The process will begin by using industry journals to examine coffee production methods; primarily comparing and contrasting industrial coffee production with shade-grown, sustainable coffee production. Students should come up with the following information: arabica coffee has the highest yields under 35 to 65% shade. In addition, growing coffee under shade also discourages weed growth, may reduce pathogen infection, protect the crop from frost, and helps to increase numbers of pollinators which results in better fruit set. However, in order to produce faster, higher yields and prevent the spread of coffee leaf rust (*Hemileia vastatrix*), many coffee plantations began to grow coffee under sunnier conditions. The fewer shade trees that are in coffee plantations, the less biodiversity there is in those plantations.

The laboratory exercise will use several small coffee plant starts (available for purchase online as seeds or a houseplant) and will grow them for a series of days under varying shade levels. Students will conduct visual assessments of plant health and growth, then conduct a traditional floating leaf disc assay protocol to assess photosynthesis levels under varying light conditions. Students will use both the previously gathered background information regarding industry practices, sustainability and plant growth as well results of the primary research to develop the memorandum regarding optimal shade levels for sustainable coffee growth.

3. “Move on Through” - Transpiration Lab

Students will initially conduct background research into water use in agriculture and the demands placed on farmers to be efficient and careful with this scarce natural resource. Students will then investigate transpiration as part of the hydrologic system, based on different genetic variations of plant structure (leaf type and shape, for example). Students will conduct a research exercise by examining transpiration in plants with various leaf structures. This can occur using locally-grown crops or by using exotic crops and adding a component regarding appropriate plant selection. In this lab, students will use the plant weight protocol to measure the transpiration rates of individual plants. Students give plants a predetermined amount of water, reweigh the plants, and continue weighing the plants over time to contrast weight differentials and determine water loss through transpiration. Students will monitor observable physical changes in the different plants' condition as water is depleted, collecting qualitative data and measuring the diurnal transpiration rates. Students will apply the individual plant water usage data to larger scale acreage to analyze water usage. Students will create a written case study to justify plant selection within the context of the sustainability of the hydrologic system. Optional extension: include in the case study how trends in daily transpiration rates change if water losses were replenished through different irrigation management techniques (drip, flood, etc.).

4. “From Trash to Gas” - Sustainable Waste Management

Students will use both primary and secondary research to discover that food scraps, dead plants, manure, and other decaying organic matter, called biomass are a rich source of energy. Energy can be procured from biomass by turning it into a gas called biogas. The process will begin by students examining agricultural examples of biogas production (small scale

composting, dairy lagoon gas extraction, codigestion, etc.) as well as the microbiological basis for biogas production, including aerobic and anaerobic fermentation, cellular respiration, lignocellulosic breakdown, etc. As part of this analysis, students will compare the amounts of biogas produced by different types of biomass. In order to quantify their findings, students will conduct an experiment with three soda bottles filled to the same volume with various types of biomass commonly used in biogas production. Bottle one will contain cow manure, bottle two will contain cow manure and household kitchen scraps, and bottle three will contain cow manure and a biological waste product of the students choosing (teacher approved). Bottles will be topped with a small balloon. Students will record the circumference of each of the balloons at the same time of day over a period of 10 days as well as record observations of the biomass inside of the bottles. Students will create a graph representing the circumference of balloons and the number of days. Students will compare graphs to determine which biomass type produced the fastest inflation of the balloon. Upon completion of the experiment, the students will then need to develop a written plan for how this naturally occurring byproduct can be harnessed to benefit a farming situation. In addition to incorporating their data, this plan should include: research on how the gas is used, the scientific processes behind biogas creation (fermentation, anaerobic digestion, etc.), biomass feedstocks that can be used to create efficient quantities of biogas, potential uses of biogas, and potential economic and sustainable benefits of instituting a biomass digester.

5. “Composting, Do the Rot Thing”

Students will examine the principle of composting organic material, and the process of converting complex organic matter into the basic nutrients needed by living organisms. Prior to conducting the experiment, students will use industry and extension publications to learn the processes of composting, as well as the benefits and challenges of compost production (available nutrient levels, community perceptions, hazardous materials, smell, storage, etc.). Following the background research, students will conduct a laboratory exercise that will examine the utilization of organic wastes (household) as nutrients for plants. It will allow students to investigate which waste products can be composted and best utilized by plants. Based off of prior knowledge of an ecosystem and how ecosystems regenerate as well as the interaction of food and fiber systems with natural cycles, students will justify specific nutrient requirements, as well as renewable and nonrenewable natural resources. Students will prepare three test plots, one plot with just soil, one with soil and household waste products collected by students, and one plot with animal waste products. Students will then monitor plant growth and development to graph their results. Students will create an informational, six paneled brochure that explains a waste management plan using compost. Included in the brochure should be information regarding the microbiology of compost production in addition to the practical household application of the research. Additionally, the brochure should outline the removal of organic matter to increase ecological sustainability while having the least environmental impact on the farm and community.

Unit 2. Assessment

Plant, Grow, Rotate, Repeat Sustainable Crop Management Plan

Students will apply concepts of the biogeochemical cycles as well as waste management to create a 3 year sustainable crop rotation plan that produces the highest crop yields for any given location with the least environmental impact. Students must analyze current soil conditions as well as community needs when considering their crops for production. Student focus should be on nitrogen fixation of specified crops. Students will use previous knowledge of ecosystems, invasive species, and producer and consumer relationships as well as research current market prices and local demands, to assess the environmental contribution and the economical impact from each crop. When creating the 3 year crop rotations students will defend their selections and the ecological impacts of their decisions. The synthesis of the students' research will culminate in written proposal to a local producer.

Unit 3: Driving Question - What molecular biology principles guide sustainable agriculture?

In this unit, students will examine the science of agriculture and evaluate the efficiency and sustainability of current methods. Students will explore the concepts of taxonomy of plants and nomenclature of animals, cell structure, cellular division, DNA, and chromosomes. Students will apply this knowledge to evaluate desirable inheritable traits in each species to artificially select characteristics to breed more efficient and productive offspring as a part of their created breeding plan. Students will be introduced to genetic markers, genetically modified organisms, and biotechnology. With this knowledge students will examine and evaluate biotechnology, the ethics of genetic manipulation, and its implication on the sustainability of agriculture and our ability to feed a growing population. As a culminating project for the first two units students will design, conduct, and interpret their own agricultural research project on a biological issue facing agriculture and present their findings with a visual, written, and oral report.

1. "Breed For The Need"- Sustainable Breeding Evaluation

Animal genetics play a role in sustainability. An animal that is genetically predicted to become heavier muscled in a shorter period of time will utilize less pasture and nutritive resources than one that takes longer to reach the same weight. A female who produces more milk to feed her offspring will utilize less resources for both her and her progeny. Therefore, summative phenotypic traits are important to evaluate in a sustainable ecosystem in order to efficiently utilize natural resources. By analyzing these traits students can determine the probability of the trait expression in an animal's offspring. After instruction on chromosomal physiology, multicellular organization, animal anatomy, basic heredity, and genetic expression, students will identify desirable characteristics from a group of four animals of the same species to create a sustainable breeding plan that will include: hybrid vigor, genetic efficiency and other genetic traits. Students will use three components to evaluate the group of four animals that include the farmer's sustainability scenario, expected progeny difference data and phenotypic evaluation of the animals. First students will read an agricultural producer's written scenario that describes the targeted phenotypic traits a farmer desires based on the

environment that must sustain the health and nutrition of the specific animals while not depleting the natural resources within that biological system. The parameters of the traits the students will evaluate include milk production (the weight of the weaned offspring that was contributed to the amount of milk the mother produced), weaning weight (the weight of the offspring when removed from the mother), yearling weight (the weight of the offspring at eighteen months of age and birth weight (the weight of the offspring at birth). Next, the students will read and analyze Expected Progeny Difference (Summative phenotype expression) data. Finally, students will perform visual observations of the phenotypic traits in those four animals. Students will assess and prioritize the three analyzed components based on importance and collectively use them to place the four animals in phenotypic order from the most desirable for the environment to the least desirable according to the farmer's sustainability scenario. Students will give an oral defense with evidence to support reasoning.

2. "Where Should I Make My Home ?"- Sustainable Production Plan

The students will be put into groups and collectively evaluate the same animals from the previous activity with summative phenotypic traits for each of the bio-geological growing zones in California which are desert and high desert, coastal, valley, foothills and mountains. Instruction should occur on plant taxonomy and livestock anatomical suitability (large animals in areas with poor biomass production, genetic hardiness factors, etc.) prior to the secondary research being done. Research done on each zone will provide information on the possible sustainability plans in which the four animals could be raised. Students will research the ecosystem of each area, analyzing what crops, pasture and range can be grown and the effects of climate and rainfall on the availability of nutrients for the animals' sustainability. Based on the data accumulated from the research they will reevaluate the four animals from the previous lab including EPD data. For each zone they will place the animals in order from the one most suited and efficient to the least. Students construct a written defense for their decision in the placing of those animals in each zone based on their data and research. They will argue the merits of their placing based on the data from their zone research: native and nonnative grass and crop survivability in each zone that provides nutrition to the animals, biological merits and disadvantages of each zone on the animals. They will then use the zone information to reevaluate the EPD data and how it can be best utilized to meet the animal's biological needs. Using the research and accumulated data students can determine a class placing for each region of California.

3. "Battle of the Seeds" - Biotechnology Use in Agriculture

Crop decisions made by agricultural producers are often predicated on understanding the climate, rainfall and topography needs of their growing area. These decisions often prioritize crop yield, but also must take into account the biological health of each system. The previous lab focused on evaluating the efficiency of specific animals introduced into an ecosystem where the biological components were predetermined and consistent. In this activity, students explore

the introduction of new plants into predetermined, consistent ecosystems by investigating how germination, growth and efficiency of plants (crops) can be affected by genetic and environmental changes. Prior to the experiment, students should be instructed in cell division and structure as functions of organism growth, genotypic traits and variable expression, traditional hybridization methods and modern genetic manipulation.

For the primary research exercise, students will set up three demonstration plots to compare growth and yield rates of plants. Half of the class will grow unweeded plots of plants, manually weed-controlled beds, and chemically controlled beds with plants that have been genetically modified to withstand the effects of a widely-used herbicide. The other half of the class will grow hybrid seed, non-hybrid seed, and genetically enhanced seed of the same plant. Upon analyzing data of plant growth and yield rates students will calculate the cost in time and money for the methods demonstrated. Students will formulate a written opinion/thesis and defend from evidence the most sustainable method of growing food based on their experiment. Students determine the statistical, economical and biological differences of genetically modified organisms as compared to natural organisms. Students will then research public concern of genetically modified organisms to prepare for a class debate. Utilizing their experimental results and research students debate the use of biotechnology and genetically modified organisms playing one of four following roles; a leader of a developing nation where hunger is a problem among their citizens, a biotechnology company specializing in producing genetically modified plants, a farmer, or a parent who primarily purchases organic produce. Students will reflect on their original opinion and write what they learned as a result of this experience.

Unit 3. Assessment:

“Hypothesize, Analyze, Repeat” - Formal Research Project

Labs and activities have been done in this unit that represent the common applications of biological factors such as genetic potential and variability of plants and animals, the symbiosis of animals and plants within an ecosystem and the impact of new species introduced into an established environment. Students will utilize the science of nature they learned in unit three, how that science fits into the biological systems from unit two and how those systems contribute to sustainability in unit one to develop a comprehensive agriscience experimental research project. Students will identify a problem related to agriculture that is the result of completing the first three units of the course (plant science, animal science, natural resources). Students will utilize the empirical method to design an experiment that will test their own authentic hypothesis using the skills and processes learned throughout the course that include dissecting published research and studies, testing the hypothesis, collecting, synthesizing, analyzing and interpreting data, accepting or rejecting the hypothesis based upon the data, technical reading and writing, and scientific collaboration. Specific expectations for the written research project are outlined below:

1. Forming a Hypothesis

Students will use credible sources to conduct background research on the agricultural issue they are investigating, and they will use this research to generate a testable hypothesis related to the scientific problem they have identified. The hypothesis developed by the student will be constructed with the independent and dependent variables in mind.

2. Experimental design and conducting experimentation

Students will construct an experimental design to test their hypothesis. A written experimental design should be constructed consistent with scientific protocol using a systematic approach outlined in the previous units. Students will have their experimental designs reviewed by industry experts, agricultural instructors, local growers/producers, researchers or university representatives. After validating the design using the peer review process, students will move to the experimentation phase of their research. Experimental designs should include replicates, control groups, and determine the variables to be controlled and how. Additionally, a determination should be made as to the type of data that will be collected and in what ways, with the emphasis placed on quantitative data or quantifying data that is qualitative in nature. Students will use their experimental design to test their hypothesis. For example, in a study of primed versus non-treated seeds, seeds would be planted in identical environments, multiple test groups would be established and compared to a control group, and the number of germinated seeds would be counted and recorded to quantify the outcome. Raw data should be recorded using a field book or electronic device.

3. Analyzing data, interpreting data and forming conclusions.

Students will determine the best methods for organizing their data using tables. Students will use mathematical principles to synthesize their data, calculating a mean, for example. Furthermore, a statistical analysis of the data will help the student determine if the results are due to chance or the independent variable that was tested. Students will choose the best way to present their data using graphs they believe will most effectively demonstrate their findings, and will further summarize what each graph shows. Finally, students will interpret the data and formulate conclusions based on the results. In the written conclusion, students will use their data to either accept or reject the original hypothesis. Conclusions should be directly supported by the data and supported by previous research. Students will also identify the limitations of their research, improvements that could be made to the experimental design, as well as future studies that may be conducted that relate the study at hand.

4. Evidence of Performing the AgriScience Research Project

Students will submit their research in a written paper, and it will include the following components: problem/purpose, background research, hypotheses, methodology, results/data, and discussion/ conclusion. The paper will be written using skills associated with technical and scientific writing, for example, refraining from the use of personal pronouns or keeping discussion limited to what the research and data suggest rather than personal opinion and bias. APA format will be utilized to reference and cite sources. Students will create a visual display board, using a digital format that mirrors the use of research posters in higher education, which

will also include all of the components of the paper, but in a condensed form. The peer group that reviewed the original experimental design will review the final research paper. The project and its findings will be shared with the class in an oral presentation, with the research board on display to aid in communicating the results of the research.

Unit 4: Driving Question: How do we make decisions to maximize sustainable agricultural practices within a functioning ecosystem?

Students will understand common practices in the agriculture industry that promote sustainability. They will evaluate and/or refine technological solutions that reduce impacts of human activities on natural systems by using practices that utilize cellular biology, genetics, energy cycles, biological systems, plant and animal nomenclature and how these units collectively create ecosystems that were covered in the previous units. Students will conduct production practices in the areas of animal science, horticulture, and natural resources. Students will experience how the biological systems can be changed at the cellular level, promoting the emergence of new energy cycles that produce useful, recyclable products that have a positive impact on the environment, thus decreasing the impact of agriculture on the environment and promoting sustainability. Students will investigate positive sustainable approaches to changing negative impacts agriculture has on the land by testing methods of efficiency in laboratory work. This experience will give students perspective on production costs and resource needs in relation to animal welfare, mechanization versus labor, and use of chemicals to non-use of chemicals. Students will utilize this hands-on production experience to develop their own sustainable farm as a culminating final project to illustrate the management of agricultural systems, management of natural resources, the sustainability of an ecosystem for the future while preserving biodiversity.

Unit 4: Key Assignments

1. “Show Me You Care” - Practice in Animal Health Management

Common animal production practices are done to ensure multi-system homeostasis and to foster productive animal growth and general welfare. Prior to conducting a laboratory exercise, students will engage in secondary research that seeks to correlate common livestock production practices to maintaining system health in animals. For example, castration, tail banding, hoof trimming and vaccinations prevent pathogen (viral, bacterial, fungal and parasitic) infections and thereby ensuring the health of the immune system, lymphatic system and respiratory system, among others. Shearing, clipping and dehorning are noninvasive procedures that provide recycling opportunities of animal by products but are also designed to maintain homeostasis and to protect vital organs throughout multiple systems (shearing reduces overall stress on the circulatory system, for example). Animal identification requires animals to have a traceable number like the scrapie tag that traces the animal to the breeder in case an animal tests positive for the genetic disease and ensure herd health (preventing disease outbreaks that can stress multiple systems).

After the conclusion of the background research, students will engage in a laboratory experience where they will conduct common livestock production procedures practiced in the United States through the application of: castration methods, dehorning practices, vaccination protocols, identification systems and shearing techniques. Students will divide into groups to demonstrate one or more of the common livestock production practices within several species of livestock and small animals. After the conclusion of each of these demonstrations, students will choose one method they demonstrated and write an explanatory position paper that correlates the production practice to physiological health in the animal, highlighting homeostatic mechanisms and system nomenclature.

2. “If You Root It, They Will Grow” - Sustainable Practices in Horticulture

The ability to graft, increase growth rates and clone species of plant, trees and crops is an option that can increase the number of organisms that can be planted in a shorter amount of time. Using one plant to create many or the ability to grow different varieties of fruit on one tree maximizes the efficiency of each organism within an ecosystem. The ability to utilize this technology increases species diversity while positively affecting land biomass. Students will experience a laboratory activity, conducting propagation techniques that make plants more efficient and in return contribute to the energy cycles within the ecosystem potentially maximizing sustainability of the plant and its production. This laboratory lets students use asexual propagation through the application of auxins directly onto plants used as a common practice in the horticultural industry. Students will also research the role of auxins and make predictions on its effectiveness on their assigned mother stock plant. Through teacher demonstration, students will learn the proper steps of asexual propagation and make cuttings of their plant. Each student will test the effectiveness of auxins (rooting growth hormone) with one row in a flat being a different concentration of hormone and one control. After two weeks students will collect data every three days and record the rate at which their plant cutting roots. Students will calculate the cost of hormone treatment versus the time for cuttings to root to recommend the use or non-use of auxins on their assigned plant in their lab report.

In the next step of the laboratory students will practice the proper steps of transplanting and fertilizer use as regular practice in the horticultural industry. Students will take their rooted cuttings and transplant them to a larger container. After direct instruction on types of fertilizers, students will make predictions on the most effective type of fertilizer for their rooted cuttings; liquid, slow release, and organic. Students will be assigned a growing area (landscape plot, or one gallon-containers) to conduct their experiment. Students will test each type of fertilizer with four rows of plants. One row will be the control, without fertilizer application and the other three rows will have liquid, slow release, and organic fertilizer applications. Students will take daily measurements and make final conclusions of fertilizer effectiveness for their plant. Students also compare cost of fertilizer to effectiveness to determine final recommendations in their lab report.

3. “It’s Easy Being Green - Growing Green Communities” - Landscaping

Students will utilize the Horticulture report and experience to create a landscape plan in groups. Students will utilize the original cuttings from the previous activity which are now grown plants.

Each group will use those plants in designing a landscape for a specific area designated by the teacher that could include areas around the school and/or community. Students must consider plant growth requirements, resources such as water, soil quality, and fertilization needs. Students must address the long term needs of their landscape and write a reflection on the positive and negative aspects with recommendations for more sustainable qualities. The students will submit their designs in a written proposal to the school and or community organizations for approval. Those approved will be planted and maintained by the group for the rest of the year.

4. “Use Me Responsibly or Lose Me Forever” - Using Nature’s Natural Resources

Students will delve deeper into natural resources conducting research on bioprospecting. They will use the knowledge gained within this unit regarding the potential to change the future through bioprospecting and the need to prevent the exploitation of those resources to preserve the biospheres for future generations. Students will read articles about the use of plants and animals in nature like coral producing a natural sunscreen named, “Sunscreen 855”. To prevent the harvest of coral in order to save the barrier reef they isolated the compound and produced it in a lab that will be the most naturally occurring sunscreen developed. Students will discuss the importance of bioprospecting, as well as how the prospect of products from plants and animals argues for the continued maintenance of biodiversity and sustainability as long as the resources are not exploited.(Biology,Prentice Hall) After the discussion students will research other types of bioprospecting happening in agriculture. They will choose one material (natural resource) being prospected and find the following information from their research: what research is being done on the material, how are they utilizing the material and how does the research and use of the material play a role in sustainability. The information accumulated on the material bioprospecting will be utilized in a flyer created by each student. The flyers will be set-up in a walking gallery where the students will use a bioprospecting rubric to score the importance of each natural resource presented as a valuable material for continued research. The students will have a class discussion about which three natural resources are the most valuable source of bioprospecting to contribute to sustainability of the human population.

5. Bioprospecting - “Motoring with Microbes” – Discovering Cellulose Microbes for Biofuel Efficiency

The students will then conduct a research lab on Bioprospecting for Cellulose-Degrading Microbes: Filter Paper Assay Method where Students collect samples that they predict will contain communities of cellulose-degrading microbes and test for the ability of microorganisms in their samples to break down pure cellulose (filter paper). In the process, groups collect evidence to test predictions about which environmental microbial samples will be the most effective for degrading cellulose. By comparing results across groups, students can begin to uncover patterns and develop explanations about the types of environments that support cellulose-degrading microbes. This lab method is nearly identical to that used by researchers and student results could help scientists discover new enzymes for efficient biofuel production that is key in agriculture’s ability to remain sustainable in the next century. Students will turn in a completed lab using scientific method and write an abstract of their research to send to the

Great Lakes Bioenergy Research Center as part of their on going research on biofuel.
<https://www.glbrc.org/education/classroom-materials>

Unit 4. Assessment and End of Course Project

“I Believe in the Future of Agriculture” - Sustainable Farming Project

Students will design a solution for developing, managing, and utilizing energy and resources through the development of a completely sustainable farm on 400 acres that must include a minimum of three crops and two species of animals. A comprehensive farming portfolio will be created. The portfolio will include data and research done from each unit within the course to be used to create their farm as well as provide evidence to defend the sustainability of that farm and thus, the best representative of sustainability. The students must research genetic varieties of crops and species of animals based on genetic efficiency and commensalism. Attention to how soil nutrients and deficiencies affect vegetative reproduction, germination, plant growth and crop adaptation within an environment must be utilized in the research. Based on the data the students will determine the crops to be produced. They will research and evaluate the species of animals that will have a symbiotic relationship with the crops they have chosen above. Phenotypic and genotypic traits, hybrid vigor, commensalism, and other variables should be used to determine the two species of animals that will be best suited for the designed environment while providing for the welfare of the animals' health and nutrition. Animal welfare must be addressed in the decisions made to create a farm that is positive and biodiverse in nature. Environmental impacts based on the crops and animals raised on the farm need to be identified dealing with biological magnification, depletion of soil /plant nutrients , use of natural resources , pollution issues dealing with waste and desertification. The students will use this information as well as the data and labs from the previous units to determine the carrying capacity of livestock and acres of crops to be grown on the farm . Biological methods of reducing the identified environmental impacts will then be designed by the student, which could include methane digesters, aquaculture, CO2 collectors and irrigation water recycling. Finally, students will address the management decisions made to reduce the farm's carbon footprint over a decade of production. The portfolio and presentations will be presented to the local farm bureau as well as other agriculture associations and businesses.

Course Materials:

Primary Textbook:

District Approved Biology Text

Example: Joe Levine and Ken Miller. Biology. Prentice Hall, New Jersey. 2008

Secondary Texts:

Herren, Ray V. The Biological Approach to AgriScience. 4th edition. Delmar Thompson Learning. 2012. New York.

Herren, Ray V. Introduction to Biotechnology: An Agricultural Revolution. Delmar Thompson Learning. 2005. New York

Camp, William G. and Thomas B. Daugherty. Managing our Natural Resources. Del Mar Publishers. 1998. New York

Baker, MeeCee and Robert Mikesell. Animal Science: Biology and Technology. 3rd edition. Delmar Cengage Learning. 2011. New York

Bidlack, James and Shelley Jansky. Stern's Introduction to Plant Biology. 12th edition. McGraw Hill Publishing. 2010. New York.

Supplemental Materials:

Burton, Devere L. and Elmer L. Cooper. Agriscience: Fundamentals and Application. 3rd edition. Delmar Thompson Learning. 2002. New York.

International Food Information Council. Biotechnology: A Communications Guide to Understanding. 2003 edition. Washington D.C.

Great Lakes Bioenergy Research Center. 2007-2013. Bioprospecting Laboratories
<https://www.glbrc.org/education/classroom-materials> Wisconsin.

United States Environmental Protection Agency. 2000-2014. What is Sustainability?
<https://epa.gov/sustainability/basicinfo.html>. Washington D.C.

Student	Grade	SAE Project MAX:100,0000 PTS:100,0000 5/28/2021 FFA (Leadership)	FFA Credits MAX:100,0000 PTS:100,0000 5/27/2021 FFA (Leadership)	ICEV/ Final MAX:100,0000 PTS:100,0000 5/26/2021 Assessments	Lesson 16: Certification MAX:50,0000 PTS:50,0000 5/24/2021 Classwork	Pumnett Square Practice MAX:25,0000 PTS:25,0000 5/21/2021 Classwork	Genetics Notes MAX:15,0000 PTS:15,0000 5/21/2021 Classwork	Transcription and Transla MAX:25,0000 PTS:25,0000 5/17/2021 Homework	RNA Notes MAX:15,0000 PTS:15,0000 5/14/2021 Classwork	Strawberry DNA Lab MAX:25,0000 PTS:25,0000 5/14/2021 Projects	DNA Notes MAX:25,0000 PTS:25,0000 5/11/2021 Classwork
[REDACTED]	83.9 B-	10	100	100	0	25	0	25	15	25	50
[REDACTED]	97.4 A+	95	100	75	50	25	15	25	15	25	50
[REDACTED]	101.4 A+	100	100	100	50	25	15	25	15	25	50
[REDACTED]	98.2 A+	90	80	100	50	25	15	25	15	25	50
[REDACTED]	87.8 B+	90	0	100	50	25	15	25	15	0	50
[REDACTED]	102.2 A+	100	100	117	50	25	15	25	15	25	50
[REDACTED]	83.7 B-	100	0	100	50	0	15	0	15	25	25
[REDACTED]	100.6 A+	100	100	100	50	25	15	25	15	25	50
[REDACTED]	96.5 A	100	100	100	50	25	15	25	15	25	50
[REDACTED]	96.2 A	100	100	100	50	25	15	25	15	25	50
[REDACTED]	4.6 F	0	0	0	0	25	15	0	15	25	7
[REDACTED]	92.8 A-	100	100	75	50	25	15	25	15	25	10
[REDACTED]	70.7 C-	0	0	75	50	25	15	0	15	15	10
[REDACTED]	97.5 A+	100	100	100	50	25	15	25	15	25	10
[REDACTED]	36.8 F	0	0	75	50	0	0	0	15	0	10
[REDACTED]	14.8 F	10	0	0	0	25	15	0	0	0	0
[REDACTED]	3.9 F	0	0	0	0	25	15	0	0	25	10
[REDACTED]	0.3 F	0	0	0	0	0	0	0	0	0	0
[REDACTED]	31.3 F	20	0	0	50	25	15	25	15	25	10
[REDACTED]	80.3 B-	0	0	85	50	25	15	25	15	25	10
[REDACTED]	88.5 B+	20	80	85	50	25	15	25	15	25	10

Student	Grade	SAE Project MAX:100,0000 PTS:100,0000 5/28/2021 FFA (Leadership)	FFA Credits MAX:100,0000 PTS:100,0000 5/27/2021 FFA (Leadership)	ICEV Final MAX:100,0000 PTS:100,0000 5/26/2021 Assessments	Lesson 16: Certification MAX:50,0000 PTS:50,0000 5/24/2021 Classwork	Pumnet Square Practice MAX:25,0000 PTS:25,0000 5/21/2021 Classwork	Genetics Notes MAX:15,0000 PTS:15,0000 5/21/2021 Classwork	Transcription and Translation MAX:25,0000 PTS:25,0000 5/17/2021 Homework	RNA Notes MAX:15,0000 PTS:15,0000 5/14/2021 Classwork	Strawberry DNA Lab MAX:25,0000 PTS:25,0000 5/14/2021 Projects	DNA Notes MAX:25,0000 PTS:25,0000 5/11/2021 Classwork
[REDACTED]	100.0 A+	100	100	100	50	25	15	25	15	25	25
[REDACTED]	83.0 B-	95	100	100	0	25	15	0	15	25	25
[REDACTED]	60.0 D-	0	0	0	0	0	0	0	15	25	25
[REDACTED]	39.3 F	25	80	0	50	0	0	0	0	0	0
[REDACTED]	38.6 F	0	60	85	50	25	15	0	15	25	25
[REDACTED]	90.3 A-	50	60	75	50	25	15	0	15	25	25
[REDACTED]	60.7 D-	50	20	85	50	0	15	0	0	0	0
[REDACTED]	90.9 A-	100	0	100	50	25	15	15	15	25	25
[REDACTED]	60.0 D-	75	60	0	50	25	15	0	15	25	25
[REDACTED]	99.5 A+	100	100	117	50	25	15	15	15	25	25
[REDACTED]	79.6 C+	30	0	75	50	25	15	0	15	25	25
[REDACTED]	70.0 C-	20	20	85	50	0	15	0	15	25	25
[REDACTED]	91.9 A-	90	100	75	50	25	15	25	15	25	25
[REDACTED]	95.0 A	85	100	95	50	25	15	0	15	25	25
[REDACTED]	64.5 D-	50	0	75	50	25	0	0	0	0	0
[REDACTED]	94.1 A	100	100	85	50	25	15	15	15	25	25
[REDACTED]	99.2 A+	100	100	100	50	25	15	15	15	25	25
[REDACTED]	80.2 B-	0	20	85	50	25	15	25	15	25	25
[REDACTED]	0.1 F	0	0	0	0	0	0	0	0	0	0
[REDACTED]	2.8 F	0	0	0	0	0	15	0	0	0	0
[REDACTED]	7.14 C-	0	0	75	50	0	0	0	0	25	0
[REDACTED]	90.0 A-	100	100	85	50	25	15	15	15	25	25
[REDACTED]	92.7 A-	100	80	100	50	25	15	15	15	25	25
[REDACTED]	90.0 A-	80	40	75	50	25	15	15	15	25	25
[REDACTED]	16.0 F	90	0	0	0	25	15	0	15	25	25
[REDACTED]	94.9 A	95	100	100	50	0	15	15	15	25	25

Student	Grade	SAE Project MAX:100,0000 PTS:100,0000 5/28/2021	FFA Credits MAX:100,0000 PTS:100,0000 5/27/2021	ICEV Final MAX:100,0000 PTS:100,0000 5/26/2021	Lesson 16: Certification MAX:50,0000 PTS:50,0000 5/24/2021	Punnett Square Practice MAX:25,0000 PTS:25,0000 5/21/2021	Genetics Notes MAX:15,0000 PTS:15,0000 5/21/2021	Transcription and Translation MAX:25,0000 PTS:25,0000 5/17/2021	RNA Notes MAX:15,0000 PTS:15,0000 5/14/2021	Strawberry DNA Lab MAX:25,0000 PTS:25,0000 5/14/2021	DNA Notes MAX:25,0000 PTS:25,0000 5/11/2021
[REDACTED]	51.3 F	60	20	0	50	25	15	25	15	0	25
[REDACTED]	61.8 D-	25	0	0	50	0	0	0	15	0	25
[REDACTED]	93.6 A-	100	100	75	50	25	15	25	15	25	25
[REDACTED]	92.1 A-	90	100	85	50	25	15	25	15	25	25
[REDACTED]	93.8 A-	85	100	85	50	25	15	25	15	25	25
[REDACTED]	37.3 F	0	20	0	0	0	0	0	15	0	25
[REDACTED]	86.0 B	100	40	95	50	25	15	25	15	25	25
[REDACTED]	92.7 A-	100	100	75	50	25	15	25	15	25	25
[REDACTED]	99.9 A+	100	100	120	50	25	15	25	15	25	25
[REDACTED]	83.5 B-	95	100	65	50	0	15	0	15	25	25
[REDACTED]	97.4 A+	100	100	75	50	25	15	25	15	25	25
[REDACTED]	85.7 B	90	40	100	50	0	15	0	15	25	25
[REDACTED]	84.6 B	100	90	75	50	25	15	0	15	25	25
[REDACTED]	0.6 F	0	0	0	0	0	0	0	0	0	0
[REDACTED]	81.0 B-	75	20	95	50	25	15	25	15	25	25
[REDACTED]	99.9 A+	100	100	100	50	25	15	25	15	25	25
[REDACTED]	81.1 B-	25	100	50	0	0	15	0	15	25	25
[REDACTED]	37.4 F	25	80	0	50	0	0	0	0	25	0
[REDACTED]	82.6 B-	95	40	100	50	25	15	25	15	25	25
[REDACTED]	90.1 A-	100	60	85	50	25	15	25	15	25	25
[REDACTED]	97.0 A+	100	100	100	50	25	15	25	15	25	25
[REDACTED]	64.2 D-	90	0	75	50	0	15	0	15	25	25
[REDACTED]	93.7 A-	90	40	100	50	25	15	20	15	25	25
[REDACTED]	2.2 F	10	0	0	0	0	0	0	0	0	0
[REDACTED]	70.7 C-	25	60	75	50	25	15	0	15	25	0

Student Name

Score

SAE

FFA Credits

FFA/SAE

AET Week

Score

Mark

S.I. S.I.

Student Name	Score	SAE	FFA Credits	FFA/SAE	AET Week	Score	Mark
[REDACTED]	90.1	125	125	100		100	A+
Alonzo Ruelas, Mathea	104.1	125	125	100		100	A+
Alvarado Vasquez, Miche	93.1	0	100	80		51.4	F
Brambila Ramirez, Rigoberto	96.7	125	125	90		97.1	A+
Chavez Rojas, Omar	85.6	62	50	50		46.3	F
De La Torre, Benjamin	47	0	125	50		50	F
Diaz Cruz, Gerardo	70	75	0	75		42.9	F
Duran-Fraga, Rocio	67.5	125	125	100		100	A+
Francis, Karilyn	92.3	125	125	100		100	A+
Fulgencio, Guadalupe	0	0	0	0		0	F
Guliano, Saul	98.3	125	125	100		100	A+
Hernandez, Eileen	92.2	0	125	75		57.1	F
Mejorada Garcia, Monserr	86	0	125	100		64.3	D-
Mollica-Palafox, Gabriel	96.7	125	125	100		100	A+
Moreno, Destiny	96.9	125	125	100		100	A+
Ramirez, Jennifer	72.6	0	125	0		35.7	F
Ramos, Jose Daniel	76.6	0	125	0		35.7	F
Reynoso, Hector	61.8	125	25	100		71.4	C-
Reynoso-Castillas, Grizelle	100.2	125	125	100		100	A+
Rivera-Jaramillo, Josue	71.5	125	125	75		92.9	A-
Rodriguez, Maria	60.1	0	75	75		42.9	F
Rodriguez Vega, Brian	47.6	125	0	80		58.6	F
Sanchez-Orozco, Nataly	49.6	125	125	75		92.9	A-
Santos Nava, Alexi	47.9	62.5	125	75		75	C
Toscano, Jalmay	93.2	125	125	70		91.4	A-
Valencia, Julian	93.3	125	100	100		92.9	A-

Student Name

Score

Mark

SAE

FFA Credits

FFA/SAE

AET Week

Score

Mark

5% 5%

Student Name	Score	Mark	SAE	FFA Credits	FFA/SAE	AET Week	Score	Mark
Agamao, Daniel	80	B-	125	100	100		92.9	A-
Alvarez Flores, Manuel Ali	44.7	F	0	0	50		14.3	F
August, Audream	8.1	F	0	125	0		35.7	F
Becerra, Madison	61.1	D-	0	125	0		35.7	F
Contreras Fernandez, Saul	90	A-	125	125	100		100	A+
Drummer, Nevaeh	21.5	F	0	25	0		7.1	F
Duenas Garcia, Juan	80.1	B-	125	125	100		100	A+
Duran Barrera, Annette	96	A	125	125	100		100	A+
Garcia Perez, Maria	80	B-	0	125	75		57.1	F
Gonzalez-Oliva, Enrique	81.8	B-	125	125	100		100	A+
Lopez, Alexandra	94.7	A	75	125	100		85.7	B
Lopez, Sarah	77.3	C+	50	25	60		38.6	F
Loya, Daniel	78.5	B-	25	100	50		50	F
Mcvay, Brayden	100.9	A+	125	125	100		100	A+
Mena Zendejas, Belzi	92.7	A-	125	125	95		98.6	A+
Merino, Anthony	92.5	A-	125	125	50		85.7	B
Montoya, Sebastian	83.2	B-	0	25	50		21.4	F
Mullins, Maddison	77.2	C+	50	125			70	C-
Nevarez Hernandez, Andi	81.4	B-	50	125	100		78.6	C+
Ochoa Mejia, Zackary	95.7	A	125	125	95		98.6	A+
Omicin, Grant	91.1	A-	125	125	100		100	A+
Ortiz Felix, Estrella	81.4	B-	125	125	90		97.1	A+
Ramirez, Keren	81.1	B-	0	100	25		35.7	F
Ramirez-Fonseca, Genesis	97.1	A+	125	125	100		100	A+
Reyes-Villicana, Liliana	98.7	A+	62	125	100		82	B-
Rodriguez, Israel	45.7	F	0	50	40		25.7	F

Rancho San Juan High School Agriculture Department Home Visit Form

Student Name: Sierra Short

Class of 20 22

FFA Goals: place at state level for
speaking contest

• run for regional office

SAE Goals: Raise market hogs for
all 3 fairs SVF, SBCF, MCF

Other Goals: pass APUSH test

Student Signature: _____

Advisor Signature: _____

Parent Signature: _____

Date: 9/26/2020

Rancho San Juan High School Agriculture Department Home Visit Form

Student Name: Yulissa Brambila

Class of 20 22

FFA Goals: ◦ regional speaking contest

◦ run for section

SAE Goals: ◦ raise lamb for SVF

Other Goals: Maintain all A's during
distance learning

Student Signature: _____

Advisor Signature: _____

Parent Signature: _____

Date: 9/24/2020

Rancho San Juan High School Agriculture Department Home Visit Form

Student Name: Daniel Auhmada

Class of 20 23

FFA Goals: • Attend MFE

• run for sectional office

SAE Goals: raise market lamb for SVF

Other Goals: Continue to get all B's during distance learning

Student Signature: _____

Advisor Signature: _____

Parent Signature: _____

Date: 9/27/2020

Rancho San Juan High School Agriculture Department Home Visit Form

Student Name: Jose Daniel Ramos

Class of 20 23

FFA Goals: improve on public
speaking by participating in a
speaking contest (maybe
impromptu)

SAE Goals: grow a vegetable garden
plot in the backyard at home

Other Goals: focus during classes (hard to
do because of distance learning)

Student Signature: _____

Advisor Signature: _____

Parent Signature: _____

Date: 9/24/2020

Rancho San Juan High School Agriculture Department Home Visit Form

Student Name: Juan Duenas

Class of 20 23

FFA Goals: run for sectional office

◦ impromptu public speaking

SAE Goals: ◦ placement project
(harvests on the weekends)

Other Goals: run for House President
and be on the advisory senate.

Student Signature: _____

Advisor Signature: _____

Parent Signature: _____

Date: 9/25/2020

Rancho San Juan High School Agriculture Department Home Visit Form

Student Name: Brayden McVay

Class of 20 23

FFA Goals: • attend MFE

• run for sectional office

SAE Goals: raise market pigs for SVF
and SBCF

Other Goals: • make junior varsity baseball
team

Student Signature: _____

Advisor Signature: _____

Parent Signature: _____

Date: 9/27/2020

Rancho San Juan High School Agriculture Department Home Visit Form

Student Name: Makayla Lemmor

Class of 20 24

FFA Goals: complete in creed
contest

run for chapter office

SAE Goals: raise market goat for
SVF

Other Goals: get involved in virtual
clubs

Student Signature: _____

Advisor Signature: _____

Parent Signature: _____

Date: 9/24/2020

Rancho San Juan High School Agriculture Department Home Visit Form

Student Name: Nazai Garcia

Class of 20 24

FFA Goals: go to virtual chapter
meetings to get involved

SAE Goals: create planter boxes
in backyard and plant
vegetables

Other Goals: Keep Straight A's

Student Signature: _____

Advisor Signature: _____

Parent Signature: _____

Date: 9/26/2020

Rancho San Juan High School Agriculture Department Home Visit Form

Student Name: Ileana Moya

Class of 20 24

FFA Goals: Compete in creed

go to sectional leadership
night

SAE Goals: vegetable garden @ home

Other Goals: get involved in ASB
and run for office next
year

Student Signature: _____

Advisor Signature: _____

Parent Signature: _____

Date: 9/25/2020

Rancho San Juan High School Agriculture Department Home Visit Form

Student Name: Maddi Mullins

Class of 20 23

FFA Goals: Compete in impromptu
run for chapter officer

SAE Goals: market steers & heifers
for SVF

Other Goals: Keep my grades up
and do not turn in any
late work

Student Signature: _____

Advisor Signature: _____

Parent Signature: _____

Date: 9/26/2020

Salinas Union High School District

Instruction

Policy # 6178

CAREER TECHNICAL EDUCATION

The Board of Trustees desires to provide a comprehensive career technical education (CTE) program in grades 7-12 that integrates core academic instruction with technical and occupational instruction in order to increase student achievement, graduation rates, and readiness for postsecondary education and employment. The District's CTE program shall be designed to help students develop the academic, career, and technical skills needed to succeed in a knowledge- and skills-based economy. The program shall include a rigorous academic component and provide students with a strong experience and understanding of all aspects of an industry.

(cf. 6143 - Courses of Study)

(cf. 6200 - Adult Education)

The District's CTE program shall focus on preparing students to enter current or emerging high-skill, high-wage, and/or high-demand occupations. CTE opportunities may be offered through linked learning programs, partnership academies, apprenticeship programs or orientation to apprenticeships, regional occupational centers or programs (ROC/Ps), charter schools, small learning communities magnet programs, or other programs that expose students to career options while preparing them for future careers in a given industry or interest area.

(cf. 0420.4 - Charter School Authorization)

(cf. 6178.2 - Regional Occupational Center/Program)

The Superintendent or designee shall explore available funding sources that may be used to support CTE programs. The Board shall review and approve all district plans and applications for the use of district, state, and/or federal funds supporting CTE.

(cf. 3230 - Federal Grant Funds)

The Board shall adopt district standards for CTE which meet or exceed the state's model content standards and describe the essential knowledge and skills that students enrolled in these courses are expected to master. The course curriculum shall be aligned with district-adopted standards and the state's curriculum framework.

(cf. 6011 - Academic Standards)

(cf. 6141 - Curriculum Development and Evaluation)

At least every three years, the Board shall compare the district's curriculum, course content, and course sequence of CTE with the model state curriculum standards. (Education Code 52376)

The Superintendent or designee shall systematically review the District's CTE courses to

Salinas Union High School District

Instruction

Policy # 6178

CAREER TECHNICAL EDUCATION

determine the degree to which each course may offer an alternative means for completing and receiving credit for specific portions of the course of study prescribed by the District for high school graduation. The Board shall ensure that these classes are equivalent in content and rigor to the courses prescribed for graduation. (Education Code 52376)

(cf. 6146.1 - High School Graduation Requirements)

(cf. 6146.11 - Alternative Credits Toward Graduation)

(cf. 6146.2 - Certificate of Proficiency/High School Equivalency)

The Superintendent or designee shall develop partnerships with local businesses and industries to ensure that course sequences, career technical and integrated curriculum, classroom instruction and projects, and assessments have real-world relevance and reflects labor market needs and priorities. He/she also shall work to develop connections with businesses, postsecondary institutions, community organizations, and/or other employers to provide students with actual or simulated work-based learning opportunities.

(cf. 1700 - Relations Between Private Industry and the Schools)

(cf. 5113.2 - Work Permits)

(cf. 6178.1 - Work Experience Education)

The Superintendent or designee shall collaborate with postsecondary institutions to ensure that the District's program is articulated with postsecondary programs in order to provide a sequential course of study. Articulation opportunities may include dual or concurrent enrollment in community college courses.

(cf. 6172.1 - Concurrent Enrollment in College Classes)

The District shall establish a CTE advisory committee to develop recommendations on the district's CTE program and to serve as a liaison between the district and potential employers. The committee shall consist of at least one teacher, business representative, industry representative, school administrator, member of the general public knowledgeable about the disadvantaged, and representative of the field office of the California Employment Development Department. (Education Code 8070)

(cf. 1220 - Citizen Advisory Committees)

The Superintendent or designee shall inform all secondary students and their parents/guardians about the CTE experiences available in the District, CTE courses that satisfy college admission criteria, and, if applicable, CTE courses that satisfy high school graduation requirements. In addition, secondary students shall receive individualized career guidance and academic counseling which provides information about academic and CTE opportunities related to the student's career goals.

Salinas Union High School District

Instruction

Policy # 6178

CAREER TECHNICAL EDUCATION

(cf. 5145.6 - Parental Notifications)
(cf. 6164.2 - Guidance/Counseling Services)

Prior to the beginning of each school year, the Superintendent or designee shall advise students, parents/guardians, employees, and the general public that all CTE opportunities are offered without regard to any actual or perceived characteristic protected from discrimination by law. The notification shall be disseminated in languages other than English as needed and shall state that the district will take steps to ensure that the lack of English language skills will not be a barrier to admission and participation in the district's CTE program. (20 USC 2354; 34 CFR 100 Appendix B, 104.8, 106.9)

(cf. 0410 - Nondiscrimination in District Programs and Activities)
(cf. 1312.3 - Uniform Complaint Procedures)

To the extent required by law, the Superintendent or designee shall invite the participation of private school students in CTE programs supported by federal funding under the Strengthening Career and Technical Education for the 21st Century Act (Perkins). (20 USC 2397)

The Superintendent or designee shall ensure that teachers of CTE courses possess the qualifications and credentials necessary to teach their assigned courses. He/she also shall provide teachers and administrators with professional development designed to enhance their knowledge of standards-aligned CTE and shall provide opportunities for CTE teachers to collaborate with teachers of academic courses in the development and implementation of integrated curriculum models.

(cf. 4112.2 - Certification)
(cf. 4131 - Staff Development)
(cf. 4331 - Staff Development)

The Superintendent or designee shall provide counselors and other guidance personnel with professional development that includes, but is not limited to, information about current workforce needs and trends, requirements of the District's CTE program, work-based learning opportunities, and postsecondary education and employment options following high school.

The Superintendent or designee shall ensure that teachers of CTE courses possess the qualifications and credentials necessary to teach their assigned courses. He/she shall also provide teachers and administrators with professional development designed to enhance their knowledge of standards-aligned CTE and shall provide opportunities for CTE teachers to collaborate with teachers of academic courses in the development and implementation of integrated curriculum models.

Salinas Union High School District

Instruction

Policy # 6178

CAREER TECHNICAL EDUCATION

- (cf. 4112.2 - Certification)
- (cf. 4131 - Staff Development)
- (cf. 4331 - Staff Development)

The Superintendent or designee shall provide counselors and other guidance personnel with professional development that includes, but is not limited to, information about current workforce needs and trends, requirements of the district's CTE program, work-based learning opportunities, and postsecondary education and employment options following high school.

The Superintendent or designee shall regularly assess district needs for facilities, technologies, and equipment to increase students' access to the district's CTE program.

- (cf. 0440 - District Technology Plan)
- (cf. 3440 - Inventories)
- (cf. 3512 - Equipment)
- (cf. 7110 - Facilities Master Plan)

The Superintendent or designee shall annually report to the Board achievement data on participating students, including, but not limited to, the percentage of participating students who successfully complete CTE programs, their performance on state and district academic achievement tests, and graduation rate. Data shall be disaggregated by program and various student subgroups. Based on such data, the Superintendent or designee shall determine the need for program improvements and update the goals in the district's local control and accountability plan as necessary.

- (cf. 0500 - Accountability)
- (cf. 6162.5 - Student Assessment)
- (cf. 6162.51 - State Academic Achievement Tests)
- (cf. 6190 - Evaluation of the Instructional Program)

Legal Reference:

EDUCATION CODE

- 1205 Classification of counties
- 8006-8156 Career technical education
- 17078.70-17078.72 Career technical education facilities
- 33430-33432 Health science and medical technology grants
- 35168 Inventory of equipment
- 41540-41544 Targeted instructional improvement block grant
- 44257.3 CTC recognition of study in linked learning teaching methods
- 44260-44260.1 Designated subjects career technical education credential
- 44260.9 Designated subjects career technical education credential
- 48430 Legislative intent; continuation education schools and classes

Salinas Union High School District

Instruction

Policy # 6178

CAREER TECHNICAL EDUCATION

48980 Parental notifications
51220-51229 Courses of study, grades 7-12
51760-51769.5 Work experience education
52060-52077 Local control and accountability plan
52300-52499.66 Career technical education
52519-52520 Adult education, occupational training
53010-53016 California Career Pathways Trust
53070-53076.4 The California Career Technical Education Incentive Grant Program
53086 California Career Resource Network
54690-54699.1 California Partnership Academies
54750-54760 California Partnership Academies, green technology and goods movement occupations
56363 Related services for students with disabilities; specially designed career technical education
66205.5-66205.9 Approval of career technical education courses for admission to California colleges
88500-88551 Community college economic and workforce development program
GOVERNMENT CODE
54950-54963 Brown Act
LABOR CODE
3070-3099.5 Apprenticeships
CODE OF REGULATIONS, TITLE 5
1635 Credit for work experience education
3051.14 Specially designed career technical education for students with disabilities
10070-10075 Work experience education
10080-10092 Community classrooms
10100-10111 Cooperative vocational education
11500-11508 Regional occupational centers and programs
11535-11538 Career technical education contracts with private postsecondary schools
11610-11611 Regional adult and vocational education councils
CODE OF REGULATIONS, TITLE 8
200-240 Apprenticeships
UNITED STATES CODE, TITLE 20
2301-2414 Strengthening Career and Technical Education for the 21st Century Act
6301-6578 Improving the Academic Achievement of the Disadvantaged
CODE OF FEDERAL REGULATIONS, TITLE 34
100.B Appendix B Guidelines for eliminating discrimination in career technical education programs
104.1-104.39 Section 504 of the Rehabilitation Act of 1973
106.1-106.61 Discrimination on the basis of sex, effectuating Title IX
Management Resources:
CSBA PUBLICATIONS

Salinas Union High School District

Instruction

Policy # 6178

CAREER TECHNICAL EDUCATION

A Governance Perspective: Interviews with School Board Members from the Nine Linked Learning Initiative School Districts, March 2014

The Linked Learning Approach to High School Reform, Governance Brief, January 2014

CALIFORNIA DEPARTMENT OF EDUCATION PUBLICATIONS

California Career Technical Education Model Curriculum Standards, Grades Seven Through Twelve, January 2013

Multiple Pathways to Student Success: Envisioning the New California High School, 2010

Career Technical Education Framework for California Public Schools, Grades Seven Through Twelve, January 2007

WEB SITES

CSBA: <http://www.csba.org>

Association for Career and Technical Education: <http://www.acteonline.org>

California Association of Regional Occupational Centers and Programs:

<http://www.carocp.org>

California Career Resource Network: <http://www.californiacareers.info>

California Department of Education, Career Technical Education:

<http://www.cde.ca.gov/ci/ct>

California Department of Employment Development: <http://www.edd.ca.gov>

California Department of Industrial Relations: <http://www.dir.ca.gov>

California Workforce Development Board: <http://www.cwdb.ca.gov/wia.org>

Commission on Teacher Credentialing: <http://www.ctc.ca.gov>

University of California, a-g Course Submissions: http://www.ucop.edu/a-gGuide/ag/course_submissions

U.S. Department of Education, Office of Vocational and Adult Education:

<http://www.ed.gov/about/offices/list/ovae/pi/cte/index.html>

U.S. Department of Labor, Bureau of Labor Statistics: <http://www.bls.gov>

Adopted: October 14, 2008

Adopted: November 13, 2012

CTE SECTORS

AGRICULTURE AND NATURAL RESOURCES SECTOR

Agriculture and Natural Resources Sector						
Course sequence	Agriculture Business Pathway	Agriculture Mechanics Pathways	Animal Science Pathway	Ornamental Horticulture (Floral Design) Pathway	Environmental Horticulture Pathway	Sustainable Agriculture Pathway
Introductory Course						Biology and Sustainable Agriculture
Concentrator Course	Agriculture Business Occupations	Agriculture Mechanics 1/2	Animal Care 1/2	Art History of Floral Design 1/2	Environmental Horticulture 1/2	Chemistry and Agriscience
Capstone Course	Advanced Agricultural Business	Agriculture Mechanics 3/4	Veterinary Science	Agriculture Business Floral Design	Hydrology, Landscape, & Sustainable Environmental Design	Advanced Interdisciplinary Science for Sustainable Agriculture

Sector description: The Agriculture and Natural Resources Sector Pathways are designed to prepare students for entry level positions as production associate, mechanic, farm hand, floral designer, gardner or equine manager or related fields. Students study skills as marketing, sales, management, safety practices, use of tools, project planning, welding, concrete work, electrical wiring, carpentry, livestock production and marketing, animal care, veterinary practices, floral based projects, plant growth and development, plant nutrition, graden preparation, landscape design, life, earth, physical and chemistry sciences with agricultural applications, including the chemical and biological principles that govern plant science , all necessary for entry level positions in the above mentioned employment fields.

Employment opportunity:

Entry Level (w/H.S. diploma)	Technical Level (w/AA or AS or certificate)	Professional Level (w/BA or BS degree)
Parts counter sales representative Production associate Mechanic Farm hand Small engine mechanic Apprentice floral designer Floral designer Plant care specialist Floral stock associate - Costco Gardner Equine manager	Technical sales representative Vineyard mechanic Agricultural technician Animal technician Horticulture technician Garden manager Sustainability coordinator	Sales representative Horticultural sales Sales Agronomist Ranch manager Farm manager Agricultural mechanics instructor Research assistant Animal educator Molecular genetics research associate Wildlife biologist Sustainable agriculture program manager Agronomist

For more information visit: www.salinasuhd.org/rop

Agriculture Business Occupations: Prepares students to perform tasks related to agribusiness, marketing, sales, agricultural economics, and management of farm and agriculturally related enterprises. Included are such topics as the study of agribusiness-related careers, farm safety management, responsibilities of management, government

organizations and regulations, basic economics, agricultural credit, and recordkeeping and accounting. Articulated with Hartnell College ABT 130 course. Credits: 10

Advanced Agriculture Business: This course allows students to develop the skills and foundational knowledge needed to start a sustainable agribusiness. In addition to being able to evaluate and differentiate agricultural business types and structures, students will also develop ethical and socially responsible decision making skills through a series of analytical and research essays as well as through detailed presentations and mock trials. While the first semester of this year-long course focuses on building an understanding of agriculture and sustainability, as well as the many forces that affect the industry, the second semester focuses on using that base knowledge to inform building business and entrepreneurial acumen. By the end of this course students will synthesize language, communication, critical thinking skills, marketing and economic principles, pertinent legal knowledge, as well as the foundations of agriculture into the design of a business plan for a sustainable agribusiness. After a series of revisions and peer editing, students will pitch the business plan to a panel of community partners and industry professionals who will not only evaluate the viability of each plan but offer critical feedback as well. Articulated with Hartnell College ABT 80 course. **(Prerequisite: Agriculture Business Occupations)** Credits: 10

Agriculture Mechanics 1/2: A year course open to all students. Strongly recommended for all beginning students, those seeking an extended agricultural mechanics studies program and those students wanting a variety of skills in agricultural mechanics. This course will cover: general equipment and shop safety practices, selection and use of hand and power tools, project planning with materials, oxy-acetylene and arc welding, basic concrete work, basic electrical wiring, and principles of carpentry. Career awareness, FFA achievement programs, and supervised project program opportunities will also be studied. Practical experience will be gained through student completion of selected projects related to study areas. Individual student construction of projects will complement class studies and qualified projects will be entered in the county fair for competition. FFA and SAEP are integral parts of the curriculum. Credits: 10

Agriculture Mechanics 3/4: This course provides students in agriculture an opportunity to reinforce and extend understanding of applied mechanical applications. Students will be exposed to mechanical, electrical and thermal power that are associated with the field of agricultural welding. Applied activities develop an understanding and skill development in metal joining and fabrication processes. Instruction will prepare students to select, operate, repair, fabricate and maintain a variety of agricultural machinery and equipment. Processes covered may include: Oxyfuel Cutting/Heating/Welding, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux-cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), Air-carbon Arc Cutting, Plasma Arc Cutting, Safety and Metal Fabrication. In addition, record keeping, communication skills, employability and human relation skills will be covered. Leadership development and Supervised Agricultural Experiences (SAE's) are also integral to this course. **(Prerequisite: Agriculture Mechanics 1/2)** Credits: 10

Animal Care 1/2: Provides students with training and skills for jobs related to livestock production and marketing. Course will include 60 hours of group instruction with a minimum of one hour each calendar week. Group instruction may include field trips and teacher supervised activity at the county fair. **(Prerequisite: must be a member of FFA)** Credits: 10

Veterinary Science: Is a hands-on science and lab-based course in which students learn about small animal care, small animal body systems, veterinary clinical practices amongst other areas. Students will also be able to experience hands on activities at the school farm as well as during classroom labs. **(Prerequisite: Animal Care 1/2)** Credits: 10

Art History of Floral Design 1/2: Provides introduction to artistic and creative perception including aesthetic valuing through a series of projects in various media including tempera, pencil, flower, tile and a variety of papers. Students are also introduced to the elements and principles of visual art design such as line, shape/form, color, balance, and emphasis using a series of floral-based projects to explore the connections, relations, and application to visual arts design. This course is UC “F” (visual and performing arts) approved. Credits: 10

Agriculture Business Floral Design: Teaches students how to make corsages and floral arrangements, including bridal bouquets and other specialty items. Growth and maintenance of ornamental CTEs under greenhouse conditions will also be introduced. This course is UC “F” (visual and performing arts) approved. **(Prerequisite: Art History of Floral Design)** Credits: 10

Environmental Horticulture 1/2: This is a year course open to all students. Emphasis is placed on introductory studies in the horticulture industry, plant growth and development, equipment and uses, soils and plant nutrition, propagation methods, garden preparation, and methods of special ornamental and garden plant production. Students receive practical skills training through laboratory and class cooperative activities conducted in the greenhouse facilities. Credits: 10

Hydrology, Landscape and Sustainable Environmental Design: The class will serve as the capstone course in the environmental horticultural pathway. The course has been UC/CSU-approved as a lab science and will cover all aspects of an environmentally sound landscape design. Students will develop an awareness of current environmental issues and determine how best to approach various issues, depending on regions and territories. Other instructional objectives include the history of landscape architecture, technical drafting, and computer design. The course will incorporate California state standards for literacy, Next Generation Science Standards, and model career technical education standards. This course is UC “F” (visual and performing arts) approved.**(Prerequisite: Environmental Horticulture)** Credits: 10

Biology and Sustainable Agriculture: Agricultural Biology is a one-year, laboratory science course, designed for the college-bound student with career interests in agriculture. The course has an extensive laboratory component in order to connect the big ideas of life science with agricultural applications, earth and physical science principles, and other curricular areas, including written and oral reporting skills. FFA and SAEP are integral parts of the curriculum. This course is UC “d” (laboratory science) approved. Credits: 10

Chemistry and Agriscience: This lab-based course is aligned to the California Content Standards for Chemistry and will include an agricultural component. This course studies the composition and behavior of matter. Atomic and molecular structure; conservation of matter and stoichiometry; chemicals and their properties; and nuclear processes are studied. Classroom demonstrations and laboratory activities are an integral part of this course. A grade of “C” or better in Algebra 1-2 recommended, or the approval of the instruction. FFA and SAEP are integral parts of the curriculum. This course is UC “d” (laboratory science) approved. **(Prerequisite: Biology and Sustainable Agriculture)** Credits: 10

Advanced Interdisciplinary Science for Sustainable Agriculture: This integrated class combines an interdisciplinary approach to laboratory science and research with agricultural management principles. Using skills and principles learned in the course, including the chemical and biological principles that govern plant science and cCTE production, students design systems and experiments to solve agricultural management issues currently facing the industry. Additionally, students connect the products created in this class with industry activities to link real world encounters and implement skills demanded by both colleges and careers. The course culminates with an agriscience experimental research project in which students design and conduct an experiment to solve a relevant agricultural issue. This course is UC “d” (laboratory science) approved. **(Prerequisite: Chemistry and Agriscience)** Credits: 10

“Envision the Possibilities”



Rancho San Juan FFA
2020 - 2021
Program of Activities

Purpose of the POA

The purpose of the Program of Activities, or POA for short, is to inform our chapter members, parents, and community of the events we do. In this membership guide one can access calendar dates, applications, leadership contacts, and/or reflect on our past accomplishments and endeavors. Our hope is that this POA can address any questions one might have about Templeton FFA, the opportunities of the FFA, benefits of joining an ag class, and so much more!

Accessing the POA

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Welcome Message and Introductions

Advisors Message

The Rancho San Juan FFA chapter was founded in 2019 in Salinas, CA. It is the last of four high school chapters to be founded in the Salinas Union High School District. As advisors, our goal is to mentor and educate your students daily about their futures in the agriculture industry. We live by the mission of the FFA by developing student potential for premier leadership, personal growth, and career success. This year we challenge our students to embody our theme by “Envisioning the Possibilities” within our FFA chapter and their SAE projects. By enrolling in one of our agriculture classes, you have joined the latest youth-led organization in the world and we look forward to your continued growth and participation in our program throughout your time at Rancho San Juan High School.

Even though we plan to work together from a distance due to the COVID-19 pandemic, there will still be a number of Leadership Development Events for you to participate and grow in. These include Creed, Impromptu, Employment Skills (Job Interview), Extemporaneous, Prepared Public Speaking and Parliamentary Procedure. All conferences that would normally be held in-person will be offered to our membership virtually this year. The benefit to this is that you can still jump right into the FFA from the comfort of your own home! Our Supervised Agricultural Experience Projects will look a little different this year as well. We hope that you will use this time to develop a strong SAE at home with your families and when we return to in-person instruction bring your knowledge to share with the rest of our chapter.

As we look into a year of uncertainty we would like to remind you that we are always there for all of our students, even at a distance. Even though this year is far from what we all imagined, we hope that you take a leap of faith with us and “Envision the Possibilities” in store for Rancho San Juan FFA. We cannot wait to blaze new trails with you all this year and make this the best year yet!

Sincerely,

Rancho San Juan FFA Advisors

Chapter Officer's Message

Meet Your Officers

President - Sierra Short

Vice President - Brayden McVay

Secretary - Yulissa Brambila

Treasurer - Daniel Ahumada

Reporter - Jose Daniel Ramos

Sentinel - Juan Duenas

Meet Your Advisors

Kacey Cadwell

A graduate of California Polytechnic State University, San Luis Obispo in 2017 with her Bachelors in Agriculture Science. This year will be Ms. Cadwell's second year of teaching. She currently teaches Sustainable Agriculture Biology, and our Introduction to Seed Science and Technology classes. She advises market hog SAE projects and coaches all leadership development events.

Nicole Booten

A graduate of California Polytechnic State University, San Luis Obispo with a major in Agriculture Science and a Master's Degree in Agriculture Education. This will be Ms. Booten's second year of teaching. She currently teaches Chemistry & Agriscience and our Agriculture Mechanics 1 / 2 classes. She advises market sheep & goat SAE projects and coaches all leadership development events.

Salinas Union High School District Information

Salinas Union High School District

431 W. Alisal Street

Salinas, CA

Phone

Fax:

Rancho San Juan High School

1100 Rogge Road

Salinas, CA 93906

Phone:

Fax:

Rancho San Juan High School Administration

Anthony Hinton
Yolanda Campos
Karyl Blalock
Elizabeth Reyes
Monica Tapia
Laurel Gast
Cynthia Padilla
Lorena Hale

Rancho San Juan Agriculture Department Advisory Committee

The purpose of the advisory committee is to offer any advice and support in the development and implementation of certain agricultural industry trends in the Rancho San Juan Agriculture Department. The advisory committee is composed of industry experts and community members.

Xavier Barba	President
Ashlee Barba	Member
Kollin Holzwart	Member
Kort Holzwart	Member
Barbara Perry	Member
Kyle Trotter	Member
Stan Uchiyama	Member
Matt Waller	Member
Kacey Cadwell	Member
Nicole Booten	Member

Rancho San Juan FFA History

Rancho San Juan History

Rancho San Juan FFA was chartered on April 25th, 2019 in Anaheim, CA and the 91st California State FFA Leadership Conference. The Rancho San Juan FFA chapter is the 4th chapter to be founded in Salinas, California. Janice Souza started the program with under 100 students and created the Seed Science and Technology CTE pathway in the district. By the second year membership doubled which created a need for two new teachers. Today Rancho San Juan High School offers 3 comprehensive agricultural pathways in Agriscience, Seed Science and Technology and Agricultural Mechanics. As Rancho San Juan FFA continues to establish itself as a new chapter we are excited to see the growth and potential opportunities in store for our members.

American FFA Degree Recipients

(NONE UNTIL 2023)

State FFA Degree Recipients

Proficiency Award Winners

Career Development Event Winners

Leadership Development Event Winners

Creed Recitation Contest

2021: Makayla Lemmon - Top 16 Regional Competitor

Impromptu Speaking Contest

2020: Sierra Short - State Competitor

2021: Juan Duenas - Regional Competitor

Extemporaneous Public Speaking

Prepared Public Speaking

Employment Skills (Job Interview)

2021: Sierra Short - 4th Place State Finalist

Past Chapter Officers

BLURB GOES HERE

2019 - 2020

President - Sierra Short

Vice President -

Secretary -

Treasurer -

Reporter -

Sentinel -

2020 - 2021

President - Sierra Short

Vice President - Brayden McVay

Secretary - Yulissa Brambila-Ramirez

Treasurer - Daniel Ahumada-Santa Maria

Reporter - Jose Daniel Ramos

Sentinel - Juan Duenas-Garcia

2021 - 2022

President - Sierra Short

Vice President - Brayden McVay

Secretary - Saul Guijarro

Treasurer - Maddison Mullins

Reporter - Makayla Lemmon

Sentinel - Isabella "Bella" Garcia

Historian - Kaitlyn Francis

Past Sectional Officers from Rancho San Juan

BLURB GOES HERE

2020 - 2021

Historian - Sierra Short

Past Regional Officers from Rancho San Juan

BLURB GOES HERE

Past State Officers from Rancho San Juan

Past State Committee Roles from Rancho San Juan

BLURB GOES HERE

2021

State Committee Chair

Sierra Short - Community Connections Committee

Star Greenhands

The Star Greenhand award is awarded annually at the spring chapter banquet. It recognizes outstanding freshman members for their involvement, dedication, and interest in being a member of the National FFA Organization.

2021

Makayla Lemmon

Star Chapter Farmers

The Star Chapter Farmer award is awarded annually at the spring chapter banquet. It recognizes outstanding second year members for their involvement, dedication, and interest in developing superior SAE projects and furthering their involvement in the National FFA organization.

2021

Brayden McVay

Non-Member Award Recipients

There are many individuals who have helped make Rancho San Juan FFA the chapter it is today. This includes our advisors, administrators, and counselors that have been honored at the Sectional, Regional, State and National level for their efforts in making our program successful.

2021

Sectional Star Administrator - Anthony Hinton

Calendar and Activity Descriptions

2020 - 2021 Calendar of Activities

This year due to the COVID-19 Pandemic, all events for the Fall Semester are virtual. A Calendar of Spring FFA Activities will be released in January 2021 at the start of the Spring Semester.

August 2020

September 2020

October 2020

November 2020

December 2020

January 2021

February 2021

March 2021

April 2021

May 2021

2020 - 2021 Activity Budget

Fundraising Activities

Restaurant Fundraisers

Drive Thru BBQ

Community Service Activities

Career and Leadership Development Events

THREE CIRCLE MODEL

Agricultural Education is delivered through three major components known as the Three Circle Model. At Everett Alvarez, we strive to educate students within the classroom and go beyond that experience in order for them to apply concepts. Students are able to participate in a number of leadership and agricultural activities that help them develop as leaders and become advocates for the industry.



FFA MISSION STATEMENT

FFA MAKES A POSITIVE DIFFERENCE IN THE LIVES OF STUDENTS BY DEVELOPING THEIR POTENTIAL FOR PREMIER LEADERSHIP, PERSONAL GROWTH, AND CAREER SUCCESS THROUGH AGRICULTURAL EDUCATION

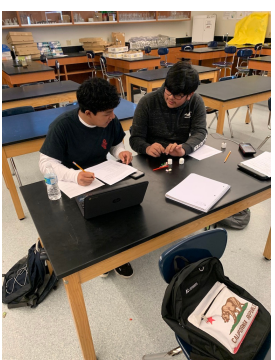


Rancho San Juan High School

ADVISORS: KACEY CADWELL AND NICOLE BOOTEN

PHONE: (831) 796 -7800
KACEY.CADWELL@SALINASUHSD.ORG
NICOLE.BOOTEN@SALINASUHSD.ORG

FRESHMAN AG CLASS: SUSTAINABLE AGRICULTURE BIOLOGY & AG MECHANICS 1/2



FFA Activities: Conferences



Greenhand Leadership Conference:
Freshman students meet members
across the state and learn about
opportunities in the FFA

FFA Activities: Career & Leadership Development Events

Career and Leadership development events give students the opportunity to explore careers within the agriculture industry and perfect their leadership skills through public speaking.

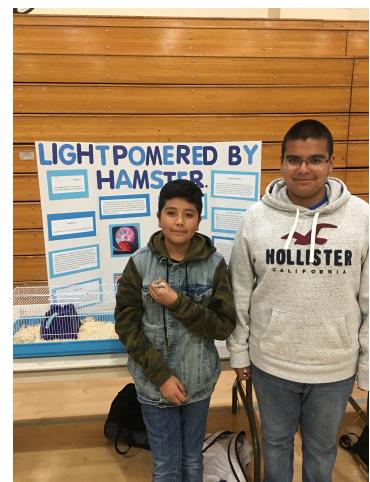


FFA Activities: Chapter Meetings / Greenhand Week



SUPERVISED AGRICULTURAL EXPERIENCE PROJECTS

Every year students are expected to complete a Supervised Agricultural Experience (SAE) Project. These projects are designed to give students hands-on experience and to develop skills in agricultural areas that interest them.



FFA Chapter Scrapbook

This year Rancho San Juan was in its second year of being a chartered program. Because our entire school year was virtual we did not have the opportunity to keep a chapter scrapbook however we worked with our Chapter Officer team to create different social media accounts to showcase our students successes throughout the virtual school year. Our hope is that next year when we return to in person instruction, we will be able to catch up and create a physical scrapbook to commemorate the 2020 - 2021 virtual school year while we create one for the 2021 - 2022 school year. We will continue to use our social media accounts as well to help us establish our presence in the community.

Summer Activities Plan

Between the 19-20 and 20-21 school years I transferred to Rancho San Juan High School from Everett Alvarez High School. Not only did I transfer to a new site, but I did this during the COVID-19 pandemic. Opportunity to work with my students and get to know my officer team in person was not something I was going to be allowed to do so I had to improvise. My teaching partner Nicole Booten and I made our individual officers goodie baskets to deliver to their homes in the summer so that they could meet us safely at a distance. Then on July 28th we had a virtual Chapter Officer Retreat. Although this in my opinion is not an ideal way to create a bond with your team we made due with the resources we had during a year of so much uncertainty. This summer we submitted paperwork for an in person officer retreat at the KOA campgrounds in Santa Cruz, CA and are waiting for district approval before we move forward with the planning.

Post-Graduation 1 Year Survey

* Required

First Name *

Your answer

Last Name *

Your answer

Permanent Mailing Address *

Your answer

Personal E-mail Address (DO NOT USE SCHOOL EMAILS) *

Your answer

What is your cell phone number? *

Your answer



Are you interested in joining our Rancho San Juan Alumni group and receiving emails about any events? *

Yes

No

How many years were you an active member of the Rancho San Juan FFA Agriculture department? *

1

2

3

4

Current Education/Military Service *

Choose

If in college or tech/trade school, what is your major?

Your answer

If in the military, what branch?

Your answer



What is the highest level of education you PLAN to complete? *

Choose

Current Employment

Choose

If in workforce (even part time while in school) what is your job title & company?

Your answer

Did any of the following opportunities in the FFA or your SAE projects help you in being better prepared for your current education and/or employment

- The FFA Creed
- Impromptu Speaking
- Extemporaneous Speaking
- Prepared Speaking
- Job Interview
- Parliamentary Procedure
- SAE Project (including Record Book maintenance)
- CDE Team (Vegetable Crop Judging)
- Other:



If you answered yes to any of the activities above, please explain how that activity prepared you.

Your answer

On a scale of 1 to 5 to what degree did Rancho San Juan FFA make an impact on your future? *

1 2 3 4 5

None at all. (Do not use any experiences) Strong positive impact on my life and career/educational goals

What can Rancho San Juan do to better serve our future membership? *

Your answer

Are you willing to serve with FFA Competition Judging/Coaching opportunities in the future? (If yes we will use your information above to contact you) *

- Yes
- No
- Maybe (would like to know more but may not be able to commit)

Submit

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Google Forms



Graduate Follow Up Results

The 2020 - 2021 school year is Rancho San Juan's second year as a high school. Because of this we currently only have freshman - juniors on our campus and in our agriculture program. I am using the creation of graduate follow up surveys as my AGED 539 project. I am also creating surveys to give students annually by class and grade that tracks their progress and pathway interests in our program. Our district is very strict in the classes we are allowed to offer because they believe that there is not enough "student interest" or "careers for that pathway" so I would like to use this follow up data to support the creation of more pathways at Rancho San Juan in the future.

Program Plan Update

When I took over as the department head at Rancho San Juan the previous advisor had not yet created a program plan. Over the past year through induction I have worked on creating the individual parts of our program plan and are basically starting from the beginning. Right now all of the documents throughout this binder (i.e. advisory information, POA, chart of responsibilities and the five year acquisition plan) are the only documents I have completed. I update those documents annually as required by the state and our regional supervisor in order for our program to receive funding. My goal this next year with induction and my masters completed is to really spend a lot of time finishing up our program plan so that by the 2022 - 2023 school year we have accurate information in all of the categories to share with the state and our community.

Rancho San Juan Agriculture Department
Advisory Committee Meeting Agenda
November 18th, 2020
5:00 PM - 7:00 PM

1. Introduction of Members and guests
2. Purpose of Meeting: Introduce new advisors, elect officers for the following year and discuss action items.
 - a. Meeting Agreements:
 - i. Start and end on time
 - ii. Be respectful of others' opinions
 - iii. Follow agenda
3. Approval of last meetings minutes
4. Election of Chair Person and Vice Chair
5. Livestock Update
6. Approve Budgets
7. Curriculum Updates
 - a. Ag Mechanics 1 - 2, Chemistry and Agriscience
 - b. Revisit Sustainable Agriculture Biology and Seed Science
8. Motion to continue operation of the program and approve curriculum
9. Action Items:
 - a. Professional Development Plan for all teachers
 - b. Grading Policy FFA/SAE
 - c. FFA Officer Election Process
 - d. Freshmen Retention
 - e. Graduate Survey - NOT APPLICABLE UNTIL 2023
 - f. Agriculture Class Size/Enrollment
 - g. Award Applications, State & American Degrees, Proficiency, etc.
 - h. Parity (enrollment, participation both local & above local level)
 - i. SAE Periods/Extended Contracts
 - j. Facility and Equipment (Five Year Plan)
10. Current Industry Issues/Trends that need to be addressed
11. Suggestions and Recommendations
12. Discuss Date and Time for Next Meeting
13. Adjournment

Rancho San Juan Agriculture Department
Advisory Committee Meeting Agenda
January 27th, 2021
5:00 PM - 6:30 PM

1. Introduction of Members and guests
2. Purpose of Meeting: Complete items not discussed at November meeting and discuss action items.
 - a. Meeting Agreements:
 - i. Start and end on time
 - ii. Be respectful of others' opinions
 - iii. Follow agenda
3. Presentation from CTE Work Experience Coordinator Mr. Evan Robinson
4. Approval of tonight's agenda
5. Approval of January 2020 minutes (postponed from November meeting)
6. Approval of November 2020 minutes
7. Approval of committee constitution and bylaws
8. Curriculum updates (postponed from November meeting)
9. Action Items (Not to all be discussed tonight):
 - a. Professional Development Plan for all teachers
 - b. Grading Policy FFA/SAE
 - c. FFA Officer Election Process
 - d. Freshmen Retention
 - e. Graduate Survey - NOT APPLICABLE UNTIL 2023
 - f. Agriculture Class Size/Enrollment
 - g. Award Applications, State & American Degrees, Proficiency, etc.
 - h. Parity (enrollment, participation both local & above local level)
 - i. SAE Periods/Extended Contracts - Teacher compensation
 - j. Facility and Equipment (Five Year Plan) - Build up record of what was achieved
10. Current Industry Issues/Trends that need to be addressed
11. Suggestions and Recommendations
12. Discuss Date and Time for Next Meeting
13. Adjournment

Rancho San Juan Agriculture Department
Advisory Committee Meeting Agenda
May 5th, 2021
5:00 PM - 6:30 PM
<https://meet.google.com/hnu-rgqf-tva>

1. Introduction of Members and guests
2. Purpose of Meeting: Complete items not discussed at November meeting and discuss action items.
 - a. Meeting Agreements:
 - i. Start and end on time
 - ii. Be respectful of others' opinions
 - iii. Follow agenda
3. Approval of tonight's agenda - skip
4. Approval of January 2021 minutes
5. Administration Approval of committee constitution and bylaws
 - a. Need to continue working on this. District administration has been hard to communicate with considering the current DL/Hybrid situation.
6. Challenges, Big Issues, and Goals facing RSJ AgEd program
7. Written FFA and SAE Grading Policy followup
8. Current Industry Issues/Trends that need to be addressed
9. Suggestions and Recommendations
10. Discuss Date and Time for Next Meeting
11. Adjournment

Rancho San Juan High School
Agriculture Department
Advisory Committee Meeting Minutes

Date: November 18th, 2020

Meeting via Google Meets

Industry and Community Members Present: Xavier Barba, Ashlee Barba, Kyle Trotter, Matt Walker, Stan Uchiyama, Barbara Perry and Janice Souza

Education Staff Present: Anthony Hinton, Estella Guterrez, Kacey Cadwell and Nicole Booten

1. Meeting was called to order at 5:15 by Kacey Cadwell
2. Introduction of Committee Members listed above and their company affiliations.
3. Purpose of Meeting: Introduce new advisors, elect officers for the following year and discuss action items.
4. Election of executive committee:
 - a. Stan Uchiyama nominated Xavier Barba for Chairperson, Barbara Perry for Vice Chairperson, and Kacey Cadwell for Secretary. Following agreement by the nominees, Janice Souza seconded the motion. Motion passed. Due to the nature of the meeting Kacey Cadwell agreed to conduct the remaining portion of the meeting.
5. Approval of minutes:
 - a. The incorrect set of minutes were distributed to members. A motion was made by Xavier Barba to postpone the approval of the Spring 2020 minutes until the next meeting. Motion was seconded by Barbary Perry. Motion passed. Kacey Cadwell will distribute correct minutes before the following meeting for approval.
6. Livestock Update:
 - a. Kacey Cadwell provided the committee with an update on the future of livestock SAE projects in our district during COVID-19. Right now the agriculture teachers at EAHS, NSHS and RSJHS are working to establish school farm safety procedures and rules on how to utilize the farm during the pandemic. Stan suggested that Nicole and Kacey work together to not only establish shared farm procedures but a procedure on how home visits will be conducted during our current restrictions. Estella Guterrez agreed to share an MOU about curbside dropoff for Kacey and Nicole to utilize.
7. Department Budgets;
 - a. SSP Grant
 - i. Janice Souza and Anthony Hinton explained the categories included in the SSP grant. Kacey Cadwell reported that even though \$75,000 was requested that RSJHS would be awarded \$110,000. Barbara Perry made a motion to approve the SSP budget. Ashlee Barba seconded the motion. Discussion: Estella Gutierrez asked if funds could be moved to different categories to reflect COVID-19 travel restrictions. Janice Souza explained that budget codes may need to be altered to redistribute funds since there will most likely be no travel expenses this year. Motion passed.

- b. AIG
 - i. Kacey Cadwell explained the Agriculture Incentive Grant budget to the committee. It was also reported that even though \$16,000 was requested only \$7,000 was rewarded. Janice Souza explained that typically funds are distributed 75% up front and 25% later in the year. Xavier Barba made a motion to approve the budget. Barbara Perry seconded the motion. No discussion. Motion passed.
- c. FFA Budget:
 - i. Kacey Cadwell presented the current budget for the FFA account at RSJHS. She explained that with the given virtual school year there were not many expenses with the exception of membership packets (@ \$10 per student) and that most of the income was being brought in through the sale of food fundraisers/sales. Barbara Perry made a motion to approve the budget. Estella Gutierrez seconded the motion. Discussion: Stan would like teachers to elaborate on their income sources and would like a summary of the school district funding. Stan asked to see what other sources of district funding the program was being awarded besides SSP, AIG and Perkins. Xavier Barba suggested we talk with Janice Souza about two industry individuals that might be willing to make donations to the program. Motion passed.

8. Curriculum Approval and Action Items

- a. Stan Uchiyama made a motion to postpone the discussion about curriculum approval and action items to the next meeting. Kyle Trotter seconded the motion. No discussion. Motion passed.

9. Motion to Continue Operation of Program

- a. Stan Uchiyama: "I move that Rancho San Juan High School Community Agriculture Advisory Committee endorse and support the continued operation of the Rancho San Juan High School agricultural education program curriculum offerings, FFA students Leadership development activities, Supervised Agricultural Experience projects and the community support group efforts benefiting the students and graduates of Rancho San Juan High School." Xavier Barba seconded the motion. Discussion: Stan explained that the advisory committee is endorsing what we do and will continue to do for our students now and in the future. Motion passed.

10. Suggestions:

- a. Stan requested that a copy of the signed Bylaws be shared with the advisory committee before the next meeting. Kacey agreed to find the digital copy and share it with the committee.

11. Establish date for next meeting:

- a. January 27th from 5-7
- b. Kacey will send out that date in the follow up email to ensure everyone can attend that date.

12. Adjournment:

- a. Xavier Barba motioned to adjourn the meeting. Kyle Trotter seconded the motion. Motion passed.

Kacey Cadwell thanked the committee for their attendance and continued support. Meeting was adjourned at 6:32pm.

Rancho San Juan High School
Agriculture Department
Advisory Committee Meeting Minutes

Date: January 27th, 2021
Meeting via Google Meets

Industry and Community Members Present: Xavier Barba, Ashlee Barba, Kyle Trotter, Stan Uchiyama, Barbara Perry and Evan Robinson

Education Staff Present: Estella Guterrez (ROP), Kacey Cadwell, Nicole Booten

1. Meeting was called to order at 5:07 by Xavier Barba
2. Introduction of Committee Members and Guests
3. Purpose of Meeting: Discuss action items.
4. Earn & Learn Presentation:
 - a. Evan Robinson gave a presentation from Earn & Learn. Presentation was about student and industry connections and scholarships
 - b. Evan to send out video and information to Kacey to share with committee
5. Approval of Agenda
 - a. Motion was made by Stan Uchiyama to approve the agenda. Motion was seconded by Barbara Perry. Motion passed.
6. Approval of January 2020 Minutes
 - a. Incorrect minutes were distributed at the last meeting in November and now correct Spring 2020 minutes were displayed. Barbara Perry made a motion to approve minutes. Ashlee Barba seconded the motion. Motion passed.
7. Approval of November 2020 Minutes
 - a. Barbara Perry made motion to approve minutes Kyle Trotter seconded the motion. Motion passed.
8. Approval of Bylaws
 - a. Bylaws were distributed to the advisory committee prior to the meeting. Stan Uchiyama made a motion to approve the bylaws as presented. Barbara Perry seconded the motion. Motion passed.
9. Curriculum Approval and Action Items
 - a. Approval of Agriculture Mechanics $\frac{1}{2}$
 - i. At the November 2020 meeting a motion was made to postpone the discussion about curriculum until the January 2021 meeting. Nicole Booten presented the Agriculture Mechanics $\frac{1}{2}$ curriculum to the committee. Xavier Barba questioned how the curriculum has been adapted to meet the needs of distance learning during the COVID-19 pandemic. A motion was made by Barbara Perry to approve the curriculum. Motion was seconded by Stan Uchiyama. Motion passed.
 - b. Approval of Chemistry and Agriscience
 - i. Nicole Booten presented the Agriculture Chemistry curriculum to the committee. A motion was made by Stan Uchiyama to approve the curriculum. Motion was seconded by Ashlee Barba. Motion passed.
10. Professional Development
 - a. Kacey Cadwell and Nicole Booten discussed the virtual professional development opportunities that have been made available to them this year including:
 - i. New Professionals

- ii. NAAE Virtual Conference
- iii. Educating for Careers
- iv. CATA (June 2021)

11. Grading Policy FFA/SAE

- a. Kacey Cadwell presented to the committee our current grading policy for FFA/SAE. Given the nature of the pandemic and distance learning our classes reduced the percentages of FFA & SAE to 5%/5%. When school returns to in person instruction in the fall percentages will increase to percentages required to receive AIG.

12. Industry Trends

- a. Xavier Barba shared a little on the current industry trends while navigating through the global pandemic. He expressed that while there is a high rate of unemployment in the state there is still no one willing to do the labor. A large portion of labor crews are being quarantined due to COVID-19. The highest rate currently being in Yuma, Arizona. We discussed where the industry should head moving forward. We need to become a more sustainable industry to help reduce the negative impacts should this ever occur again.
- b. Xavier Barba also discussed some prominent E.coli strains being found in the Yuma area and their impacts on the market and agriculture.

13. Adjournment

- a. Stan Uchiyama made a motion to adjourn the meeting. Barbara Perry seconded the motion. Motion was passed.

Kacey Cadwell thanked the committee for their attendance and continued support. Meeting was adjourned at 6:32PM.

Rancho San Juan High School
Agriculture Department
Advisory Committee Meeting Minutes

Date: 5/5/2021

Meeting via Google Meets

Industry and Community Members Present: Xavier Barba, Ashlee Barba, Kyle Trotter, Stan Uchiyama

Education Staff Present: Estella Guterrez (ROP), Kacey Cadwell, Nicole Booten

1. Meeting was called to order at 5:18PM by Xavier Barba
2. Introduction of Committee Members and Guests
3. Purpose of Meeting: Discuss action items.
4. Approval of January 2021 Minutes
 - a. Stan Uchiyama made a motion to approve minutes Ashlee Barba seconded the motion. Motion passed.
5. Administration Approval of Bylaws
 - a. Bylaws still need to be sent off to administration and district for signatures. Will send interdistrict mail to get approved.
6. Challenges, Big Issues and Goals for RSJ FFA
 - a. Kacey Cadwell and Nicole Booten were a little unclear what this meant and asked the experienced advisory committee if they could clarify.
 - b. Stan Uchiyama explained that we are to utilize our advisory committee to stay up to date with the trends that are happening in the agriculture industry
 - c. Keep the trends written down and saved for the program to go back and reference when needed.
 - d. We should organize our big issues by what the advisory committee can help us solve so that we are able to keep moving forward and continue growing the program.
 - e. Updates: RSJ is hiring a third teacher for the 2021 - 2022 school year to teach agriscience.
7. Grading Policy FFA/SAE
 - a. Kacey Cadwell presented to the committee our current grading policy for FFA/SAE. Given the nature of the pandemic and distance learning our classes reduced the percentages of FFA & SAE to 5%/5%. When school returns to in person instruction in the fall percentages will increase to percentages required to receive AIG.
 - b. When we return to in person instruction these numbers will go back to 10% & 10%.
 - c. Xavier Barba recommended that we utilize students that are heavily involved in agriculture mechanics and FFA to present to the introductory mechanics classes about the opportunities in the FFA. This shows students that it IS possible for them to get involved and not be super interested in the leadership component.
 - d. Use advisory to bring in community members and make connections to come in and present to students.
8. Industry Trends
 - a. Xavier Barba talked about the labor shortage all over agriculture and how there is a huge loss in profits because of this. We are seeing an increase in processed products (chopped lettuce and smaller packaged products) because of convenience and a reduction in labor.
 - b. There is a lot of competition from large companies for labor because they can afford to pay the competitive rates.

- c. Need to call Farm Bureau and get school's name on mailing list to receive industry trend newsletters
 - d. Xavier reported that robotics could be the answer to our labor shortage with increased technology.
9. Next Meeting
- a. All members will be emailed minutes and to discuss a possible date for the next meeting. We will also be collecting who would like to return and continue serving on our committee again next year.
10. Adjournment
- a. Stan Uchiyama made a motion to adjourn the meeting. Estella Guterrez seconded the motion. Motion was passed.

Kacey Cadwell thanked the committee for their attendance and continued support. Meeting was adjourned at 6:23PM.

AGRICULTURE ADVISORY COMMITTEE
"COMMUNITY PARTNERSHIP WITH EDUCATION"

Rancho San Juan High School
Agriculture Department
1100 Rogge Road - Salinas, CA 93906

CONSTITUTION AND BY-LAWS

FOUNDED OCTOBER 2019

Adopted: January 15, 2020

Amended:

ARTICLE 1: THE COMMITTEE.

Section A: Statement: Program of instruction in agricultural education should be advised by a committee representative of the agriculture interests of the community.

Section B: Rationale: Agriculture Education must be kept relevant to the changing nature of modern agriculture. The instructional program must be based on currently acceptable practices used in agriculture and its related industries in order for Agriculture Education students to succeed in the agriculture career market. This can happen more readily when teachers regularly consult with up-to-date successful agriculturalists.

ARTICLE 2: PURPOSES AND LIMITATIONS

Section A: The Agriculture Advisory Committee shall exist for the purpose of appraising the quality of the school's education in agriculture program and related instructional components, including its relationship within the school district's education in agriculture framework and goals.

Section B: The Agriculture Advisory Committee shall exist for as long as it shall be authorized by the Administration of the High School and the Board of Education, or when community input is necessary in appraising the quality indicators of instructional programs in agricultural education.

Section C: The Agriculture Advisory Committee shall limit its activities to matters and issues which directly concern the instructional programs, policies, practices, progress-hindering problems, and general direction of the school's Agriculture Department. All activities shall be **ADVISORY ONLY**.

Section D: The Agriculture Advisory Committee May direct its advice and/or recommendations toward the teacher(s) of agriculture, the school administration, or the Board of

Education, which-ever level that can provide satisfactory attention to such advice or recommendations.

ARTICLE 3: FUNCTION AND DUTIES

Section A: It shall be the primary duty of the Agriculture Advisory Committee to:

1. Study the needs of the agriculture community and agriculture education students which are related to the goals and objectives of the school's Agriculture Education Department.
2. Review and make recommendations regarding the goals, objectives, program components, and practices of the school's program of agriculture education; as study experience and community needs may warrant.
3. Aid and guide the Agricultural Education Department in those activities which lead to progress and modernization of the agricultural education program including, but not limited to, the following:
 - a. As needed, review and provide advice regarding courses, and course content to be offered to high school and/or adult students.
 - b. Assist in developing student recruiting programs and/or offer counseling assistance as needed.
 - c. Provide advice on the instructional practices, facilities, and equipment available for program use; working towards improvement and modernization of instruction.
 - d. Assist in evaluating the total program or its components according to acceptable objectives and procedures, including special program standards or activities undertaken by the committee involving:
 - Relevant instruction.
 - Program completion standards review.
 - Program management.
 - Priorities review and development assistance.
 - Follow-up surveys and placement of students.
 - FFA component.
 - Validation of program activities.
 - Supervised Agricultural Experience Program component.
 - Overall program planning.

Section B: As available, may serve as classroom resource persons to the instructional program.

Section C: Members shall annually review and set committee goals of service, review committee By-Laws, and Program of Activities Guide.

Section D: If requested, assist in the selection process of new agricultural education staff personnel.

Section E: As need, members shall serve as resource persons and spokesperson between the Agricultural Education Department and the school administration, Board of Education, and the community.

Section F: As needed, members may provide special assistance to work with groups participating in the maintenance and/or progress of the agriculture education department program.

Section G: As needed, members shall serve on ad-hoc committees formed by the general membership of the Agriculture Advisory Committee.

Section H: As desired, committee members may undertake special projects or activities to assist Ag/FFA students in their FFA and SAEP efforts, including fundraising support.

ARTICLE 4: MEMBERSHIP SELECTION AND VALIDATION

Section A: Agriculture Advisory Committee membership shall be voluntary, non-paid service, and shall be limited only to the number and resources needed by the committee to accomplish its function and duties.

Section B: Members will be selected in such a way that they, at best, represent a cross-section of the farm and agribusiness community served by the local Agricultural Education Program.

Section C: Qualifications of community members shall be determined by their successful employment or relationship within the local agriculture industry.

Section D: school board members, high school administration, agriculture education teacher, or individual agriculture advisory committee members can nominate Members for committee appointment.

Section E: As accepted, each Agriculture Committee member shall be annually approved by the school principal, district administration, and the Board of Education. Once approved by the Board of Education, addition of committee members shall only need to be approved by the school principal.

1. Initial membership roster shall be made available by the January meeting or earlier.

Section F: In case of vacancies, new members shall be appointed to fill those vacancies as described in the above selection and approval procedures. Such new members shall serve only for the time remaining by the vacated position.

Section G: Upon initial contact, prospective committee members shall be notified of their nomination or appointment by the school principal, committee chair, or their representative.

ARTICLE 5: MEMBERSHIP COMPOSITION, LENGTH OF SERVICE AND VOTING

Section A: Except for school-employed personnel, each member appointed shall serve for a one (1) year term, corresponding with the academic year of school.

Section B: By their consent, returning committee members are eligible for re-appointment to the committee at the first meeting of the school year.

Section C: The Agriculture Advisory Committee shall be composed of the following minimum number of representatives:

1. Six (6) community representatives from the local agriculture industry.
2. The school principal or one (1) of his administrative functioning representatives.
3. At least one (1) junior or senior level agriculture education student.
4. If available, one (1) recently graduated agriculture education student who has completed a minimum of two (2) years of enrollment and is currently employed in agriculture or is pursuing a post-secondary education in agriculture.
5. One (1) representative of a school's Agriculture/FFA support group.
6. Each teacher of agriculture education employment at the local high school.

Section D: Voting members shall include all committee members except teachers of agriculture education, and appointed school and district administration or personnel.

Section E: Each voting committee member is entitled to one (1) vote and all proxy votes must be in writing and approved by the committee.

Section F: A quorum at meetings shall consist of four (4) members present, excluding the agriculture education teachers, school administration member, and high school student representative. For lack of a quorum, agenda items discussed, actions taken, etc. shall be classified as "unofficial" or postponed until a later time.

ARTICLE 6: MEETINGS

Section A: At the first meeting of the academic year, usually by October 31. The Committee shall establish its yearly meeting schedule; selecting a regular day and week of the month. When a holiday falls upon a regular meeting date, such meeting will be held on the following like day or as decided by the Committee Chairman.

Section B: Committee meetings shall not continue for more than one hour and thirty minutes (90 minutes) after being called to order, unless so extended by the committee members present.

Section C: the chair of the committee may call special meetings or summer services.

Section D: Because of the nature of member job commitments and/or out-of-town responsibilities, each member is charged with the obligation of attending as many scheduled meetings as possible.

Section E: Each teacher of agriculture education should attend all meetings. However, for multi-teacher Departments, at least one (1) teacher representative shall attend every committee meeting.

Section F: An individual May lose membership if he/she fails to attend three (3) consecutive meetings without a cause of absence directed to the committee chair or secretary.

ARTICLE 7: FINANCES

Section A: The local school shall pay postage, supplies, and copying costs for materials necessary in conducting the business of the committee.

Section B: Any special funds generated by the Agriculture Advisory Committee shall be deposited with and accounted through special agreement with a Rancho San Juan High School Agriculture/FFA support organization, as designated by the Agriculture Education Advisory Committee. This account must be a non-district associated account. Interest income earned by the Committee funds shall be given to this appointed organization as payment for handling services.

Section C: Expenditure of any special funds of the committee shall be for special needs, except those described in Section A identified and approved by the committee. Special needs shall be, but not limited to class field trip transportation and related costs, educational equipment and supplies, teacher substitute costs, student leadership conference fees, awards and recognition, committee member expenses for special meetings, and expenses for special committee programs.

ARTICLE 8: RECOMMENDATIONS AND ACTION:

Section A: Recommendations of importance to the progress and operations of the agricultural education program or its classroom, FFA and/or SAEP components shall be made in writing to the school principal for initial attention to or action on. A copy of written recommendations shall be given to the agriculture education Department Chairman for reference and appropriate action.

Section B: Actions on written recommendations made shall be in a timely manner and come from the appropriate level of school or district administration, whether it be informative, prohibitive, or positive in nature.

ARTICLE 9: OFFICERS AND DUTIES

Section A: The officers of the committee shall be Chairman, Vice Chairman, and Secretary-Treasurer. These officers shall be considered members of the executive committee.

Section B: The officers shall be annually elected or appointed by a majority vote of the committee members present at the first meeting of the academic school year.

Section C: The Chairman shall be elected from the group of community agriculture industry members who have served on the committee for at least one (1) year.

The duties of the Committee Chairman shall be:

1. To preside at all committee meetings and assist in developing meeting agenda topics.
2. To serve as Chairman of the Executive Committee.
3. To appoint special ad-hoc committees which may include persons other than the committee members.
4. As necessary, to call special committee meetings.
5. To coordinate all committee activities and serve as a liaison person or appoint a committee member to serve as a liaison person between the committee and school administration, district administrators, Board of Education members, or agriculture industry members.
6. To make at least one (1) progress report to the school board each year.
7. To meet with or select a committee representative to meet with the school principal each semester, to discuss the progress, needs, or concerns of the committee.
8. When applicable, to insure the selection of Ag. Industry committee member representatives to serve on established District-wide Agriculture Advisory, Career Technical Advisory, or other Agricultural Education ad-hoc committees; whichever form is established.

Section D: The duties of the Committee Vice Chairman shall be:

1. To perform the duties of the Chairman during their absence, and to assist the Chairman in coordinating committee activities, including assigned committee responsibilities.
2. When applicable, to be one of the committee representatives to serve on established District-wide Agricultural Advisory, Career Technical Advisory, or other Agricultural Education ad-hoc committees, which-ever form is established.

Section E: The duties of the Committee Secretary-Treasurer shall be:

1. To prepare written notices of all regular and special meetings and to distribute them to all committee members and guests within one week prior to the scheduled meeting date.
2. To assist the Chairman in the meeting agenda preparations and to keep members informed of committee meeting schedules and obligations.
3. To maintain a record of discussions, recommendations, actions taken, committee appointments, etc. and have them available at each meeting.
4. To maintain a permanent record file of all committee activities, meeting minutes, attendance records, and other committee materials.
5. To distribute minutes of committee meetings and copies of other committee documents to members, principal, district administrators of agricultural education, superintendent, and others who may be concerned with committee meetings and actions.
6. To deposit funds, monitor records, process expenditure approvals, and make regular financial reports to committee on account balance and other special funds established by the agriculture advisory committee.
7. To maintain annual Program of Activities Guide, Committee Constitution and By-laws, and have available for review by the second committee meeting of each year.

Section F: The local high school facilities, equipment, and office staff shall be made available to assist committee officers in carrying out their appointed duties.

Section G: The duties of the Executive Committee are to direct special committee activities directed by the Chairman or the committee, including activities between meetings.

ARTICLE 10: RECOGNITION OF SERVICE

Section A: As available, recognition of service documents shall be awarded to committee members by the local high school or District Career Technical Education office.

Section B: A letter of appreciation, certificate of appreciation, or similar document of recognition shall be annually awarded to members fully completing their term of committee membership service.

ARTICLE 11: CHANGES IN CONSTITUTION AND/OR BY-LAWS

Section A: Changes in the Constitution and/or By-laws can be proposed by any committee member and shall be reviewed by the Executive Committee.

Section B: Constitution and/or By-laws changes require a 30-day minimum review period before voting to adopt or reject the proposal by a majority vote of the committee members present when such vote is called for.

Proficiency Standards for Program Completers

Our district utilizes the CTE AFNR standards to identify our program completers. At Rancho San Juan we currently use the standards from the Agriscience, Agricultural Mechanics, and Plant and Soil Science categories based on our pathways to identify students that have gone above and beyond in our pathway. In addition to using the identified program standards we as a department use Greenhand and Chapter degrees to also identify our program completers because we believe that students should not only excel academically in the classroom but succeed in their FFA and SAE circles as well to be identified as a program completer. Not all of the requirements are 100% followed and some are modified to fit our students' situations and needs but we mainly base our program completers off of the three ring model in agriculture education.

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

Kacey Cadwell

is hereby awarded the

Specialist Instruction Credential (Agriculture)

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 04/30/2019 to 05/01/2024



Fine Sloan

*Chair, Commission on
Teacher Credentialing*



Mary Vixie Sandy

*Executive Director,
Commission on Teacher
Credentialing*

California Commission on Teacher Credentialing

By virtue of the authority vested in the Commission on Teacher Credentialing and in recognition of preparation for service in California Public schools

Kacey Cadwell

is hereby awarded the

Single Subject Teaching Credential

together with all the rights, privileges, and responsibilities appertaining thereto

valid: 04/30/2019 to 05/01/2024



Fine Sloan

*Chair, Commission on
Teacher Credentialing*



Mary Vixie Sandy

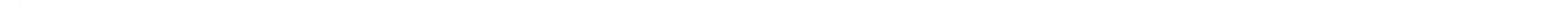
*Executive Director,
Commission on Teacher
Credentialing*

SOUTH COAST REGION CALENDAR



July 2020 - June 2021

Link To Calendar: https://www.calaged.org/calendar_south.aspx



August 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 Mid State Fair
2 Mid State Fair	3	4	5 Ventura County Fair	6 Santa Clara County Fair Ventura County Fair	7 Santa Clara County Fair Ventura County Fair	8 Santa Clara County Fair Ventura County Fair
9 Santa Clara County Fair Ventura County Fair	10 Ventura County Fair	11 Ventura County Fair	12 Ventura County Fair	13 Ventura County Fair	14 LA Section COLC - N. Hollywood Ventura County Fair	15 LA Section COLC - N. Hollywood Ventura County Fair
16 Ventura County Fair	17	18	19	20	21 4:30PM SB Section CATA - Guerra Home	22
23	24 4:30PM SLO Section CATA - Shandon	25 4:30PM MB Section CATA - Watsonville	26 4:30PM SC Section CATA Sobrato	27 4:30PM SC Section CATA - Sobrato	28 5:30PM SC Section BBQ & Dance - Gilroy	29
30	31					

September 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
Monterey County Fair	Monterey County Fair	State Staff Meeting	State Staff Meeting GLC - Bakersfield	State Staff Meeting GLC - Bakersfield	State Staff Meeting GLC - Bakersfield	South Coast SOLC - Atascadero
13	14	15	16	17	18	19
South Coast SOLC - Atascadero	Santa Cruz County Fair	Santa Cruz County Fair GLC - Lakeside GLC Fresno	Santa Cruz County Fair GLC Fresno GLC - Calipatria	Santa Cruz County Fair GLC - Menifee	Santa Cruz County Fair GLC - Menifee	Santa Cruz County Fair
20	21	22	23	24	25	26
Santa Cruz County Fair	5:00PM LA Section CATTA - N. Nollywood State Exec, Advisory, Board Meeting	National Delegate Training	GLC - Lemoore	GLC - Lemoore Industry Tour - Salinas Chowchilla Cotton Contest	GLC - Lemoore	10:00AM MB Section Blue & Gold
27	28	29	30			
	4:00PM Ventura Section CATTA Administrative Night - Santa Paula					

October 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3 COLC reservation numbers due to Greg Beard 8:00AM-2:00PM SB Section O/C Contest - P.V.
4	5	6 GLC - Redding GLC - Lodi San Benito County Fair	7 GLC - Redding GLC - Lodi San Benito County Fair 4:00PM SLO Section O/C - Paso Robles	8 GLC - Lodi San Benito County Fair	9 GLC - Lodi San Benito County Fair	10 Fresno State Ag Fest South Coast COLC - Hollister
11 South Coast COLC - Hollister	12	13	14 Greenhand Conference SCR 4:00PM Ventura Section O/C Contest - Santa Paula	15 Greenhand Conference SCR	16 Greenhand Conference SCR	17
18	19	20	21 4:30PM MB Section O/C Contest and CATA - Greenfield	22 4:30PM SC Section O/C Contest - Morgan Hill	23	24 Corcoran Cotton Contest
25	26 National Convention Delegate Trip	27 National Convention Delegate Trip	28 National Convention Delegate Trip National FFA Convention	29 National Convention Delegate Trip National FFA Convention	30 National FFA Convention LA FFA Social	31 National FFA Convention CA FFA Washington DC Trip Cotton State Finals West Hills Fall Field Day

November 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 CA FFA Washington DC Trip	2 CA FFA Washington DC Trip MB Section Manuscript DUE	3 CA FFA Washington DC Trip Ventura Section Project Competition 4:00PM-7:30PM Section Leadership Night- San Luis Obispo Section	4 Ventura Section Project Competition	5 New Professional Institute Ventura Section Project Competition 5:00PM LA Section BIG & O/C Contest - N. Hollywood 4:00PM-7:30PM Section Leadership Night- Monterey Bay Section	6 New Professional Institute 5:00PM SC Section FFA Activity - Gilroy	7 State Cotton Judging Contest SB Section Go For The Gold Games
8	9 4:00PM-7:30PM Section Leadership Night- Santa Clara Section	10 4:00PM SB Section BIG & CAT A - Nipomo	11	12 4:00PM Ventura Section BIG & NNN Paril Pro - Fillmore 4:30PM SC Section BIG & COOPS Contest - Campbell 4:00PM-7:30PM Section Leadership Night- Ventura/LA Sections	13	14 Fillmore Field Day
15	16	17	18 4:00PM MB Section Creed, Prepared, & Extemp. Contest - King City 6:00PM Ventura Project Comp Banquet - TBD	19 4:00PM-7:30PM Section Leadership Night- Santa Barbara Section	20	21
22	23	24	25	26 Thanksgiving	27 Mid-Winter Community College Mtng	28 Mid-Winter Community College Mtng
29	30					

December 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 NAAE Conference 4:30PM SC Section Parii Pro - Sobrato	2 NAAE Conference	3 NAAE Conference	4 NAAE Conference Sierra Natural Resources Contest	5 NAAE Conference Reedley Middle College Natural Resources Contest 8:00AM LA Field Day - Paul Revere
6	7	8	9 4:00PM Ventura Section PS, Creed, COOPS Contests - Camarillo 4:30PM Santa Clara Section Parii Pro - Sobrato	10 Advanced Leadership Institute CATA Advanced Leadership Conference - TBD	11 Advanced Leadership Institute CATA Advanced Leadership Conference - TBD SLO CATA Holiday Social	12 CATA Advanced Leadership Conference - TBD Minaretes Natural Resources Contest
13	14 South Coast Region Road Show 11:59PM MB Section JI Resumes DUE	15	16	17	18	19
20	21	22	23	24	25 Ventura Section Holiday Dinner TBD Christmas	26
27	28	29	30	31		

January 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
					Student Teacher/Mast Teacher Conclave - Modesto State CATA Governing Board Student Teacher Conclave	Porterville College Citrus Contest
3	4	5	6	7	8	9
		State Staff Meeting	State Staff Meeting	Student Teacher/Mast Teacher Conclave - Modesto State Staff Meeting State CATA Governing Board Student Teacher Conclave	Student Teacher/Mast Teacher Conclave - Modesto State CATA Governing Board Student Teacher Conclave	MFE/ALA Sacramento Dinuba Vine Pruning Contest Reedley Tree Pruning Contest Mendota Natural Resources Contest Exeter Citrus Contest
10	11	12	13	14	15	16
					MFE/ALA - Redding State Officer, Norm Com, State Committee, Scholarship Applications Due	MFE/ALA - Redding Tulare Citrus Contest Salma Vine Pruning Contest Nevada Union Natural Resources Contest
17	18	19	20	21	22	23
		3:30PM SLO CATA & State Degree - Atascadero SLO Section JI Resumes & Manuscripts DUE	MB Section JI/Parli Pro/BI/CO-OPS/CATA & State Degree - Rancho San Juan	4:30PM SC Section CATA & State Degree - Sobrato LA Section Degrees	MFE/ALA - Monterey #1 SC Section - All Project Comp. & LDE Materials DUE - Google Classroom	MFE/ALA - Monterey #1 Reedley College Winter Field Day Natural Resources State Finals
24	25	26	27	28	29	30
MFE/ALA - Monterey #2	MFE/ALA - Monterey #2	4:00PM SB Section State Degree - Santa Maria	4:00PM Ventura CATA & State Degree - Santa Paula	5:00PM LA Section PS, JI, Extemp., & Creed Contest - Camoga Park	MFE/ALA - Ontario	Santa Clara Project Competition, PS, & Creed Santa Clara Leadership Field Day - Hollister MFE/ALA - Ontario Winter State Finals Arbuckle Field Day MJC Invationals PPO
31						

February 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Supervising Teacher Institute Mentoring Conference - TBD STAR Applications Due	2 Supervising Teacher Institute Mentoring Conference - TBD 4:00PM SLO Section CATA - SLO HS 4:00PM SLO Section Prepared Speaking & JI Contest - Templeton	3 9:00AM South Coast Region Proficiency Scoring - Shandon	4	5 MFE/ALA Visalia #1	6 MFE/ALA Visalia #1 College of the Redwoods Field Day
7 MFE/ALA Visalia #2	8 MFE/ALA Visalia #2 4:30PM SB Section COOPS & Parli-Pro Contest - Righetti	9 State Officer Pre-Screen Tulare Farm Show 4:00PM SLO Section Parli Pro & COOPS - SLO HS	10 Tulare Farm Show 4:00PM SB Section Public Speaking Contest - Arroyo Grande	11 Nom Com Pre-Screening Tulare Farm Show 4:30PM SLO Section BIG/Creed - Morro Bay	12 MFE/ALA - Modesto	13 MFE/ALA - Modesto Carpinteria Ag Mechs, Field Day
14	15 10:00AM State FFA Advisory Committee Meeting 10:00AM State FFA Executive Committee Meeting	16 National FFA Week	17 National FFA Week	18 National FFA Week	19 National FFA Week 6:00PM-8:00PM SB Section Dance	20 Ventura Section Field Day
21 3:00PM South Coast Region Officer Screening - Templeton	22 9:00AM South Coast Region CATA Meeting - Cuesta	23 State Proficiency Scoring SLE - Sacramento	24 State Proficiency Scoring SLE - Sacramento 4:00PM Ventura Section Parli Pro Contest - Ventura	25 State Proficiency Scoring SLE - Sacramento	26 SLE - Sacramento	27 West Hills College Field Day
28						

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Star Farmer Interview Tours 1:00PM South Coast Regional Parli Pro Contest - Nipomo	2 Star Farmer Interview Tours	3 Star Farmer Interview Tours Highland Vegetable Contest	4 Star Farmer Interview Tours South Coast Spring FFA Mtg - King City	5 UC Davis Parli-Pro Contest	6 UC Davis CDE Field Day West Hills College Field Day
7	8 State Manuscripts & Job Interview Materials DUE	9	10	11	12 MB Section Project Comp. Schedule Numbers DUE - King City	13 Chico State CDE Field Day Merced College CDE Field Day Dinuba Field Day
14	15	16	17	18 State Speaking Finals	19 State Parli Pro Finals	20 State FFA Conference - Sacramento
21 State FFA Conference - Sacramento	22 State FFA Conference - Sacramento	23 State FFA Conference - Sacramento	24	25	26	27 Merced-El Capitan Small Engines Contest Gridley Field Day Reedley College Field Day Woodlake Floral Contest
28 State Officer Candidate Training	29 SLO Project Competition	30 SLO Project Competition	31 SLO Project Competition			

April 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 SLO Project Competition	2 SLO Project Competition	3 Merced - El Capitan Ag Mechanics Contest CRC Field Day & Ag Sales State Finals Clovis Vet Science Contest South Coast Showdown FFA Welding Field Day
4 Easter	5	6	7	8	9 MB Section Project Competition Applications DUE Madera - Liberty Vet Science Contest	10
11 South Coast State Degree - Clark Center	12	13 6:00PM SLO Section Project Competition Banquet - Paso Robles	14 MB Section Project Competition	15 MB Section Project Competition	16	17 Fresno State Field Day Clovis Welding Contest Fowler Nursery & BIG Contests
18	19	20	21 SLO Section Bowling	22 LA Section Officer Screening - North Hollywood	23	24
25	26	27 6:00PM MB Section Project Competition Banquet - Soledad	28	29 4:00PM SLO Section Officer Elections - Coast Union	30 SLO Section Officer Applications DUE POSTMARKED	

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 Cal Poly State Finals
2	3	4 4:00PM SB Section Elections & CATA - Pioneer Valley 4:30PM SC Section Officer Elections - Hollister	5 Ventura Section Loan Analysis Contest SB Section Project Competition - Arroyo Grande 4:00PM MIB Section CATA Planning & Officer Elections - Gonzales	6 SB Section Project Competition - Lompoc/Santa Ynez	7 SB Section Project Competition - Santa Maria	8
9	10 5:00PM LA CATA Planning Meeting & Officer Elections - Eagle Rock	11	12 Salinas Valley Fair	13 Salinas Valley Fair SB Section Project Competition - Nipomo	14 Salinas Valley Fair SB Section Project Competition - Righetti	15 Salinas Valley Fair
16 Salinas Valley Fair	17	18 4:30PM SC Section CATA Planning Meeting - Hollister	19 4:00PM Ventura Section CATA Planning Meeting - Camarillo SB Project Competition Numbers DUE to Lompoc	20	21	22
23	24	25 6:30PM SB Section Project Competition - Lompoc Banquet	26 4:00PM Ventura Section Officer Elections - Carpinteria	27	28	29
30	31					

June 2021

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 4:30PM SLO CATA Planning Meeting - Kyle's State Staff Meeting	2 State Staff Meeting	3 State Staff Meeting	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21 CATA - State Conference	22 CATA - State Conference	23 CATA - State Conference	24 CATA - State Conference	25	26
27	28	29	30			



INCENTIVE GRANT IN-SERVICE ACTIVITIES DOCUMENTATION

CRITERIA 4.B

School Year

20-21

School _____ -

Based on the previous year's record, every agriculture teacher, teaching at least ½ time agriculture, attends a minimum of four of the following professional development activities:

Qualified and Competent Personnel

ACTIVITIES	TEACHERS NAMES							
	Booten	Cadwell						
Fall Region Meeting	X	X						
Region In-service Day	X	X						
Spring Region Meeting	X	X						
Section In-service*	X	X						
Section In-service*	X	X						
Section In-service*								
Section In-service*								
Summer Conference	X	X						
University AgEd Skills Week								
Professional Development **	X	X						

* Four Section In-service Meetings equals one Professional Development Activity

** Can utilize a maximum of two other "Agriculturally Related" Professional Development activities than those listed above. Explain the Professional Development:

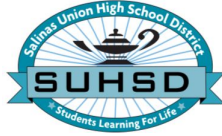
1 New Professionals Institute

2

3

4

5



LOCAL FIELD TRIP REQUEST

A "Field Trip Request" must be submitted to the site administration for approval: NOT LESS THAN FOUR (4) WEEKS PRIOR to the trip to receive tentative approval and calendar the trip.

INSTRUCTIONS: Complete and attach the "Field Trip Safety Planning" form and other required documents.

Date of Request: 4/7/2021 Teacher-in-Charge Cadwell

(Certificated)

Date of Trip: 5/12 & 5/15/2021 School Rancho San Juan High School

Field Trip Destination/Address: Salinas Valley Fairgrounds 625 Division St, King City, CA 93930

Field Trip Telephone Contact: (831) 385-3243

Number of Students Attending: 3 Number of Adult Chaperones Attending: 2

Names/Cell Number of Certificated Chaperones: Kacey Cadwell 949-554-8306, Nicole Booten 760-703-0

Names of Other Adult Chaperones: _____

Departure Time: 7:00am Return Time: 5:00pm

Leaving From: Personal Houses (No students being Returning To: Personal Houses (No students being

Estimated Cost: 340.08 (1 day x 2 subs) Funding Source: AIG

Purpose of Trip: Students will exhibit their market animals that they have been raising since January a
Project fullfills SAE requirement for agriculture courses.

Substitute(s) Needed: Yes No If yes, how many? 2

I have reviewed the SUHSD "Field Trip Guide" and this trip is in compliance with the guide.

4/7/2021
Date

Kacey Cadwell
Print Name of Teacher in Charge

Kacey Cadwell
Signature

Principal Approval _____ Disapproval _____

Date _____ Principal's Signature _____

Comments: _____

CALIFORNIA AGRICULTURAL
TEACHERS' ASSOCIATION

Kacey Cadwell

SERVING AGRICULTURE BY TEACHING
2020 / 2021 ACTIVE MEMBER

Professional Development Conference Summary Form

Name: Kacey Cadwell

School Site: Rancho San Juan High School

Professional Development Opportunity: New Professionals Institute

Date: November 3rd & 4th, 2020

Consider the following:

- What was your driving question?
- What change in practice can you implement?
- What are the expected results?
- What did you learn?
- What are your next steps/

Brief description of event:

I attended the virtual New Professionals Institute on November 3rd and 4th. Although this conference is much more beneficial in person because we get to reconnect with our colleagues from across the state and network with new colleagues, the GrowAGED program did a wonderful job with this conference. I attended workshops on how to better engage my students in labs and agriscience projects and I look forward to bringing all of my new knowledge back to my department so that we can share this information and passion with all of our students.

Signed: _____

Kacey Cadwell

Date: _____

11/10/2020

Rancho San Juan Agriculture Department
5 Year Equipment and Materials Acquisition Schedule
2020 - 2021 School Year

2020 - 2021

- School Farm
- Greenhouse
- Equipment to fill woodshop side of the shop

2021 - 2022

- Portable equipment for livestock projects
- Supplies and consumables for ag mechanics pathway

2022 - 2023

- School Farm stand to sell produce (Produce store)
- Supplies and consumables for ag mechanics pathway

2023 - 2024

- Supplies for agriscience pathway
- Supplies and consumables for ag mechanics pathway

2024 - 2025

- Supplies for rabbit and chicken SAE's
- Supplies and consumables for ag mechanics pathway

Operating Budget

Being a new department we do not have a document yet that we use to track our expenses for our program. This past year I have kept track of all of our PO's with copies of submissions and invoices in order to keep an accurate record of our spending. As explained under our district budget process we only have a few sources on campus for materials. I have one more year of the SSP grant in order to fund larger materials for my Seed Science and Technology pathway. I will fortunately continue to have a Perkins allocation for that pathway of \$1300 per class (varies by year) but do not have Perkins to fund my Sustainable Agriculture Biology classes and will have to seek other sources of funding if I want to be able to purchase materials or supplies for that class. Over the past year I have gotten creative with supplies and found things that I can use in both my Seed Science and Biology classes so that I can use the SSP funding and Perkins to fund both classes but I do not know if that will always be the case. As our program continues to grow we are going to network with various companies and expand our grant knowledge so that we are able to always find ways to fund our program and give our students the best opportunities possible.

Rancho San Juan High School Agriculture Department Budget Process

At Rancho San Juan we currently have three sources of funding: AIG, Perkins through ROP/CTE, and our SSP grant.

AIG currently helps us fund all of our consumables for our agriculture mechanics shop since we do not have another source of funding for that at this time. This year we were allotted \$7,307.00.

Our Perkins grant which comes from our ROP/CTE school gives us roughly \$1300 per CTE course to fund materials. Because our CTE school does not recognize Sustainable Agriculture Biology and Chemistry & Agriscience as a CTE course at this time we do not receive any funding for those classes.

Lastly the department head before myself Janice Souza wrote two new courses for the creation of a Seed Science and Technology Pathway. This made us eligible for a 3 year SSP grant in the value of over \$120,000.00 to spend on materials and supplies. Right now we are in the works of installing a greenhouse and possibly purchasing a trailer to be able to load and pick up supplies from local growers and suppliers.

Overall the funding in our district is incredibly challenging and there are alot of hoops to jump through to get funding. I am still learning the ropes of how I can utilize certain accounts and what we are allowed to spend funds on. Next year as a second year department head I will continue to work with my administration to find new sources of funding in order to continue supplying our students with the materials they need to succeed.

Department Chair Responsibilities

- Attend monthly leadership meetings
- Registration for conferences
- District Accounting PO's
- FFA PO's
- Office Depot PO's
- Budgets
 - District
 - AIG
 - SSP
- Travel Requests

ALL OTHER DEPARTMENT DUTIES ARE SPLIT BETWEEN MYSELF AND MY
TEACHING PARTNER NICOLE BOOTEN

2020-2021 RSJ Agriculture Department

Staff Assignments

Ag Department		Cadwell	Booten
	Department Chair	x	
	FFA Advisor		x
Accounting		Cadwell	Booten
	CATA Registration	x	
	Departmental/District Accounting/PO's	X	ASSIST
	FFA Accounting/PO's	X	
	Hotel Reservations	x	x
	Office Supplies Orders	X	
	Budgets	x	ASSIST
	Travel Requisitions/Claim Forms	X	
General Program/Facility		Cadwell	Booten
	5-year Equipment Allocation	x	
	Advisory Committee Roster and Minutes	X	X
	Ag Advisory Committee Planning and Agenda	x	X
	FFA Support Club (TBD 2021 - 2021)		
	Chart of Staff Responsibilities	X	
	Comprehensive Program Plan	x	x
	Department Marketing/PR		x
	Graduate Follow-up	X	X
	Incentive Grant Reviews	x	
	Maintenance Requests	x	x
	R2 Report and Roster	x	
	Recruitment	X	X
	Transportation Requests	X	X
FFA Advisor		Cadwell	Booten
	Registration for CDE Contests	x	x
	Program of Activities	X	
	Website	X	
	Digital Year in Review	X	
Project Competition		Cadwell	Booten
	Organize Local Project Competition	x	X
	Sectional Project Comp Judges	x	X
FFA Week		Cadwell	Booten
	FFA Week Ag Lunch	x	x
	FFA Week Staff Lunch	x	x

	FFA Week Activities	X	X
	FFA Week Meeting	X	X
Conferences			
	Chapter Officer Leadership Conference	X	X
	Greenhand Conference	X	
	MFE/ALA Conference		X
	State Conference	X	
	National Convention (TBD 2022 - 2023)	x	x
	Chapter Officer Retreat	X	X
	Sectional Officer Leadership Conference	X	
Community Service			
	Gleaning	X	
	Adopt - A - Family	X	
	Monterey Sheriff Stuffed Animal Drive	X	
Chapter Officers			
	Chapter President	X	X
	Chapter Vice President	X	X
	Chapter Secretary	X	X
	Chapter Treasurer	X	X
	Chapter Reporter	X	X
	Chapter Sentinel	X	X
	Chapter Historian	X	X
Chapter Meetings			
	September Virtual Meeting - Bingo	X	X
	October Virtual Meeting - Pumpkin Carving/Movie	X	X
	November Virtual Meeting - Pictionary	X	X
	December Virtual Meeting - Holiday Social	X	X
	January Meeting -	X	X
	February Meeting -	X	X
	March Meeting -	X	X
	April Meeting - Elections	X	X
	May Meeting - Spring Banquet	x	x
Fairs and Shows			
	Fair Supplies	x	
	Salinas Valley Fair	x	x
	Swine Projects	x	
	Sheep Projects		x
	Meat Goat Projects		x

	Dairy Goat Projects		x
	Small Animal Projects	x	x
	Industrial Arts Projects (TBD 2022 - 2023)	x	
Facilities			
	School Farm	x	x
	Ag Mechanics Shop		x
	Ag Vehicle	x	
	Livestock Trailer (TBD 2021 - 2022)	x	
CDES and LDES			
	Creed Speaking	X	x
	Extemporaneous Speaking	X	x
	Prepared Public Speaking	X	x
	Job Interview	X	x
	Impromptu Speaking	X	x
	Opening and Closing Officer Team	X	x
	Opening and Closing Advanced	X	x
	Opening and Closing Novice	X	x
	Ag Welding	x	x
	BIG	X	X
	COOPS	X	X
	Vegetable Crops Judging	x	x
Awards			
	National Chapter Award	x	
	Proficiency Awards	x	x
	Incentive Trip Tabulations/Planning		x
	Star Administrator	x	
	Star Counselor	x	
	Star Advisors	x	
	Star Supporting Staff	x	
	Star Reporter	x	
	CATA Outstanding Program		x
	State FFA Degree Applications	x	x
	American Degree Applications	x	x
Fundraisers			
	Floral/Plant Sales (TBD 2022 - 2023)		x
	Food Fundrasing (Restaurants)	x	x
	See's Candy	x	x
	Butter Braids (TBD)		x
	Drive Thru BBQ		X

Professional Development		Cadwell	Booten
	CATA Summer Conference	x	x
	Agriskills	x	
	Roadshow	x	x
	New Professionals	x	x
	Advanced Leadership Summit	x	

Hello,

Thank you for subbing for my class May 12th, 2021. Most of the students are pretty respectful and should not give you any issues. Below I have left lesson plans of what the classes should be working on.

Block 0/7: Veterinary Science and Animal Care ROP

*These are off campus ROP classes I teach, just mark ALL students as here.

Block 2/4: Sustainable Agriculture Biology

*Take roll (there are no seating charts)

* Students are going to be working on ICEV lessons 3 & 4 on their chromebooks. The lesson titles are listed below:

Lesson 3: Forests: Conservation and Management

Lesson 4: Grasslands: Conservation and Management

* REMIND ALL STUDENTS THAT I WILL BE GRADING THESE TWO LESSONS THIS WEEKEND FOR CREDIT AND IT IS WORTH OVER 100 POINTS.

*If students finish both lessons they may work on additional lessons or other assignments.

*Students can use cell phones to listen to music/complete ICEV (some do not have chromebooks), but the cell phones should not be distracting other students.

*Students are allowed to work in pairs. But if they get too loud you can make them work quietly.

Advisory

*Take roll

*Students will work individually on their own homework for other classes if they do not have an assignment from another class.

Block 6 is my prep so I would check-in with the office to see what else they need you to do.

IMPORTANT INFORMATION:

- Bathroom: Only one student at a time and pass must be created in e-hallpass
- Bell Schedule: I have made a copy of the bell schedule and left it in the folder.
- Please make sure the door is closed gently at all times.
- Seating Charts: There are no seating charts for these classes.
- Disruptive Students: *All students have been warned about being disruptive or disrespectful. Please remind them they will have serious consequences! Write down their names so I know who I need to talk to.*
- Emergency Evacuation: If there is an Emergency Evacuation there is a clipboard on the wall by the door near my desk. There you will find what you need in case of an evacuation.
- There is also an updated phone list with numbers to teachers and all of administration, if you need to get ahold of someone just dial the extension, no need to type any numbers before.

Thank you for subbing. You can reach me if you have any questions by call or text at 9495548306 or email me at kacey.cadwell@salinasuhd.org

Best,

Kacey Cadwell

C

F. Program Completion Standards

Program completers are defined as vocational Agriculture majors-students who have completed three or more years of Vo-Ag instruction or students who have completed three or more Vo-Ag courses within their selected program.

These students should score at least 75% competency on the proficiency tests being developed.

I. California Agriculture

- A. Students will understand the economic importance of the agricultural sector in California, and be able to identify the leading production areas and commodities.**
- B. Students will understand the interrelationship of agriculture and society in California, including factors which influence agricultural activities**
- C. Students will understand the impact of agricultural production on the environment and natural resources of California.**
- D. Students will develop an appreciation of energy, its effects on modern agriculture, and potential applications of alternative sources of energy available to the field today.**

II. Animal Science

- A. Students will understand the importance of domestic animals and their roles in modern society.**
- B. Students will develop a basic understanding of animal behavior, morphology, taxonomy, general reproductive traits, and natural selection.**
- C. Students will develop a basic understanding of the structure, function, and maintenance of the major body system (e.g., digestive systems) and their components.**
- D. Students will develop a basic understanding of the theory of inheritance and the genetic basis for animal selection.**
- E. Students will develop an understanding of the factors involved in animal nutrition, animal feeding, and the basic feedstuffs for that purpose.**
- F. Students will understand the concept of animal health. They will become familiar with methods of identification of**

unhealthy animals, preventive measures, treatment, and the casual agents of common health problems in animals of economic importance.

- G. Students will develop an appreciation for the factors involved in and the ability to evaluate and select livestock for specific uses.
- H. Students will understand the basis for meat grading and develop an appreciation of the variety of products available from meat animals.

III. Plant science

- A. Students will understand the growth and development of plants, including the functions of plant parts, reproductive systems, and auxins.
- B. Students will understand the role of soil in plant production, including factors that affect soil productivity.
- C. Students will understand the role of fertilizers in agricultural production.
- D. Students will understand the role of irrigation in plant production.
- E. Students will understand the importance of pest control in agricultural production and appreciate the need for safe pesticide application procedures.
- F. Students will develop an appreciation for safety in the work place and the proper use of tools.
- G. Students will understand the basic applications of measurement in calculating volume and distance and develop an appreciation for the differences between the U.S. Customary and metric systems.

IV. Agriculture Business Management

- A. Students will appreciate the importance of keeping accurate records of business transactions in agriculture.
- B. Students will understand the basic role of financial credit in agriculture, including sources and costs of farm credit.
- C. Students will understand the basic concepts of computer literacy and appreciate the role of computer applications in agriculture.

V. Leadership

- A. Students will appreciate the wide variety of leadership training activities available through the FFA.

- B. Students will appreciate the important role that communication skills play in developing leadership abilities.**
- C. Students will understand the principles of parliamentary procedure.**
- D. Students will understand the basic concepts of scientific inquiry and critical thinking.**

VI. Supervised Occupational Experiences (SOE)

- A. Students will appreciate the importance of supervised occupational experience programs (SOE) in the total program of agricultural education.**

VII. Employability

- A. Students will develop knowledge of job search techniques and resources available to the job seeker.**
- B. Students will develop an understanding of the importance of the first contact in the job search.**
- C. Students will begin to understand what occurs during an interview, methods of preparation for the interview, and the purpose of the follow-up letter.**
- D. Students will appreciate the fundamental requirements for keeping a job. They will discuss the importance of interpersonal communications, appropriate dress, and self-evaluation procedures.**

VIII. Careers

- A. Students will become aware of career opportunities available, skills required for different occupations, and the importance of work to the individual and society.**
- B. Students will develop tentative occupational goals, and will begin to plan steps appropriate to achieving the stated goals through the career plan.**

Reimbursement Process

The Salinas Union High School District is not very in favor of reimbursement of employees. Instead of being reimbursed for any costs, I am required to submit purchase orders in advance to my principal's secretary so that she can create the SBA number and prepare for reimbursement. Even then, the district does not like reimbursing teachers personally so things typically need to be purchased using funding. I can create open purchase order in my district to places (i.e. Lowe's, Smart & Final) and provide my SBA number at check out and the business will bill my school for the money spent. If the money spent goes over the amount that I requested I am required to reimburse the account with my own personal funds or the order will bounce. Because the district does not like to reimburse us for purchases, they typically provide resources so that we are not put in the situation where we need to use our own money. It keeps everything very neat and organized which is a plus but I do not always enjoy having to wait to spend money or being denied spending money because of where my requests were placed. This is a challenge that I did not face student teaching in a small district but as I spend more time in this large district I know I will be better prepared so that my expenses are not being requested at the last minute.

AGED 539
Project

1st Year Survey

* Required

First Name *

Your answer

Last Name *

Your answer

What grade are you in? *

- Freshman
- Sophomore
- Junior
- Senior

What is your student email? *

Your answer



What agriculture class are you in? *

- Sustainable Agriculture Biology
- Chemistry & Agriscience
- Introduction to Seed Science & Technology
- Advanced Plant Genetics and Breeding
- Agriculture Mechanics 1/2
- Agriculture Mechanics 3/4

What agriculture pathways are you interested in? (Select all that apply) *

- Plant & Soil Science (Crop Science)
- Ornamental Science (Floral/Nursery Operations)
- Animal Science
- Agriculture Mechanics
- Agriculture Leadership
- Agriculture Business (Sales, Economics and Government)
- Agriscience (Biology & Chemistry)

Are you already familiar with the FFA? *

- Option 1



Do you know what your plans are after high school? *

- Attend 2-year college
- Attend 4-year college
- Trade/Technical school
- Straight into workforce
- Join Military
- I am not sure yet (skip next question)
- Other:

If you answered the question above do you know what you want to pursue as a career?

Your answer

If you do not know what you want to do quite yet, what are you career goals?

Your answer

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4th Year Survey

* Required

First Name *

Your answer

Last Name *

Your answer

What is your student email? *

Your answer

What agriculture class are you currently enrolled in? *

- Sustainable Agriculture Biology
- Chemistry & Agriscience
- Introduction to Seed Science & Technology
- Advanced Plant Genetics and Breeding
- Agriculture Mechanics 1/2
- Agriculture Mechanics 3/4



What are your future plans after graduation? *

- Attend 2-year college
- Attend 4-year college
- Attend Trade/Tech school
- Go straight into the workforce
- Join the Military
- Other:

If going to college or trade/tech school, which schools are you applying to?

Your answer

What are you planning on majoring in?

Your answer

If going straight into the workforce, do you know what position/company?

Your answer

If going straight into the military, what branch?

Your answer



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Pre-Graduation Survey

* Required

First Name *

Your answer

Last Name *

Your answer

Personal Email Address (OTHER THAN SUHSD EMAIL) *

Your answer

What is your permanent address? *

Your answer

What is your phone number? *

Your answer



Are you interested in joining our Rancho San Juan Alumni group and receiving emails about any events? *

Yes

No

How many years were you an active member of the Rancho San Juan FFA Agriculture department? *

1

2

3

4

What are your future plans for NEXT year? *

Choose

If attending 2-year college, 4-year college or trade/technical school what is your major?

Your answer

What are your career goals? *

Your answer



What was/were your SAE projects during high school? *

Your answer

Pathways completed throughout time in Rancho San Juan Agriculture Program *

- Agriscience Pathway (Sustainable Agriculture Biology and Chemistry & Agriscience)
- Seed Science Pathway (Introduction to Seed Science & Advanced Plant Genetics and Breeding)
- Agriculture Mechanics (Ag Mech 1/2 & Ag Mech 3/4)

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Post-Graduation 1 Year Survey

* Required

First Name *

Your answer

Last Name *

Your answer

Permanent Mailing Address *

Your answer

Personal E-mail Address (DO NOT USE SCHOOL EMAILS) *

Your answer

What is your cell phone number? *

Your answer



Are you interested in joining our Rancho San Juan Alumni group and receiving emails about any events? *

Yes

No

How many years were you an active member of the Rancho San Juan FFA Agriculture department? *

1

2

3

4

Current Education/Military Service *

Choose

If in college or tech/trade school, what is your major?

Your answer

If in the military, what branch?

Your answer



What is the highest level of education you PLAN to complete? *

Choose

Current Employment

Choose

If in workforce (even part time while in school) what is your job title & company?

Your answer

Did any of the following opportunities in the FFA or your SAE projects help you in being better prepared for your current education and/or employment

- The FFA Creed
- Impromptu Speaking
- Extemporaneous Speaking
- Prepared Speaking
- Job Interview
- Parliamentary Procedure
- SAE Project (including Record Book maintenance)
- CDE Team (Vegetable Crop Judging)
- Other:



If you answered yes to any of the activities above, please explain how that activity prepared you.

Your answer

On a scale of 1 to 5 to what degree did Rancho San Juan FFA make an impact on your future? *

1 2 3 4 5

None at all. (Do not use any experiences) Strong positive impact on my life and career/educational goals

What can Rancho San Juan do to better serve our future membership? *

Your answer

Are you willing to serve with FFA Competition Judging/Coaching opportunities in the future? (If yes we will use your information above to contact you) *

- Yes
- No
- Maybe (would like to know more but may not be able to commit)

Submit

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AGED 539
Project Reflection

Kacey Cadwell

AGED 539

Dr. De Lay

10 June 2021

AGED 539 Project Reflection

For my AGED 539 project I decided to focus on graduate follow-up survey data. The benefit to being a new agriculture program I was able to start with scratch on how we wanted to collect and start creating our follow-up data.

Our program is in its second year and only has a handful of junior students therefore we have no data on file at this time. We want to utilize this data for more than just providing it to our regional supervisor for funding. Our goal with this sequence of surveys is to begin tracking our students' progress through our agriculture program and FFA chapter. After they graduate we are hoping to continue data collection on their educational and career pursuits so that we can be sure our program is offering pathways that benefit ALL of our students. Right now our district only sees value in programs that have local data and output. Our hope is that through this series of surveys our students take from year one in our program to 1 & 5 years out, we will be able to take student and graduate feedback to our district and ensure our program is supporting the interests and opportunities for all of our membership.

Project included planning of survey data and creation of all surveys. With our virtual school year and split schedule we did not administer the surveys because we wanted to be sure that this data reflects our entire membership and we knew we would not have a very accurate sample of our students if we posted it online for them to complete on our own. The first survey will be completed in the Fall of 2021 and will continue to grow from there.