

WEST SONOMA COUNTY UNION HIGH SCHOOL DISTRICT

TO: Kellie Noe, Board President

FROM: Keller McDonald, Superintendent

DATE: March 5, 2014

ITEM: **CONSIDERATION OF APPROVAL OF VOTE IN CALIFORNIA SCHOOL BOARD ASSOCIATION SUBREGION 3-A (SONOMA COUNTY) 2014 DELEGATE ASSEMBLY ELECTION**

BACKGROUND INFORMATION:

The California School Boards Association (CSBA) operates a Delegate Assembly comprised of geographical representatives from across the state. Local school boards within specific geographical regions or sub-regions vote to fill vacancies in the CSBA Delegate Assembly as vacancies occur.

CURRENT CONSIDERATION:

An election is now being held to fill one vacancy for a representative to the CSBA Delegate Assembly from Subregion 3-A (Sonoma County). This position is a two-year term, from April 1, 2014 through March 31, 2016. Edwin Gillardi, Trustee for the Cotati-Rohnert Park Unified School District, is the only declared candidate for this position. A biographical sketch for the candidate is attached.

Each public school board in Sonoma County that is a CSBA member is allowed one vote for either a declared candidates or a write-in candidate. School boards must submit their ballots, with the vote of the Board, postmarked by Monday, March 17, 2014.

At this time, the Board will consider casting one vote for a declared candidate or write-in candidate for CSBA 2014 Delegate Assembly election from Subregion 3-A (Sonoma County).

RECOMMENDATIONS:

The administration recommends the Board vote for a CSBA 2014 Delegate Assembly Representative from Subregion 3-A (Sonoma County). The Superintendent will then submit the Board's official ballot in this election.

ATTACHMENTS:

Yes

This complete, **ORIGINAL** Ballot must be **SIGNED** by the Superintendent or Board Clerk and returned in the enclosed envelope postmarked by the post office no later than **MONDAY, MARCH 17, 2014**. Only ONE Ballot per Board. Be sure to mark your vote "X" in the box.
A PARTIAL, UNSIGNED, PHOTOCOPIED, OR LATE BALLOT WILL NOT BE VALID.

OFFICIAL 2014 DELEGATE ASSEMBLY BALLOT
SUBREGION 3-A
(Sonoma County)

Number of vacancies: 1 (Vote for no more than 1 candidate)

Delegates will serve two-year terms beginning April 1, 2014 – March 31, 2016

**denotes incumbent*

Edwin Gilardi (Cotati-Rohnert Park USD) *

Provision for Write-in Candidate Name

School District

Signature of Superintendent or Board Clerk

Title

School District/COE Name

Date of Board Action

See reverse side for a current list of all Delegates in your Region.

2014 Delegate Assembly Candidate Biographical Sketch Form



DUE: Tuesday, January 7, 2014 (U.S.P.S.)

Mail to: CSBA | Attn: Leadership Services | 3251 Beacon Blvd., West Sacramento, CA 95691 | or fax 916.371.3407

Please complete, sign and date this required one page candidate biographical sketch form. An optional, one-page, single-sided, résumé may also be submitted; both will be copied exactly as received. Please do not state "see résumé" and please do not re-type this form. Any additional page(s) exceeding this one page candidate form will not be accepted. It is the candidate's responsibility to confirm that all nomination materials have been received by the CSBA Leadership Services department. Late submissions will not be accepted.

Name: <u>Edwin Gilardi</u>	CSBA Region: <u>3A</u>
District or COE: <u>Cotati-Rohnert Park Unified School District</u>	Years on board: <u>17</u>
Contact Number: <u>707-217-2321</u>	E-mail: <u>ed_gilardi@sbcglobal.net</u>

Are you a continuing Delegate? Yes No If yes, how long have you served as a Delegate? 2 years

CSBA's Delegate Assembly sets the general education policy direction for the Association. As a member of the Delegate Assembly, please describe what your top three educational priorities would be, and why they are important to the Association. In these challenging times we all face, CSBA must continue to look at and plan for the future in order to provide all students with the quality education they deserve. In order to achieve this CSBA must focus on these three priorities: 1) Solving the endless roller coaster of State funding. We need a system that will provide an equal ongoing funding formula that will put an end to our current system of uncertainty. We need to continue to build relationships with other stakeholders and together keep the pressure on Sacramento in order to provide our schools with steady ongoing funding. The new "Local Control Funding Formula" will not solve our funding problems, but it is a good start! 2) Returning local control to our schools. State regulations tie our hands by funding schools with a one size fits all system. We at the local level know best what is needed by our students at our local schools. Prior to prop. 13 these decisions were made locally and it's time we get back to a system that serves our students and schools best. The new "Local Control Funding Formula" is a start but much more needs to be done. We asked for local control and we need to show Sacramento that we can get the job done. 3) Continuing its ongoing education and support services to local board members and the schools they serve. Over the past 17 years that I have served on my local school board I have participated in many CSBA training programs and workshops. I graduated from CSBA's Masters of Boardmanship program, which lead to CSBA developing its Masters of Governance program. Both programs have provided board members with extensive training in the realities of being on a school board and showcase CSBA commitment to ongoing education and training. While some of these opportunities are now available on-line I would advocate for the expansion of these trainings and workshops on-line for those who can't attend group trainings.

Another responsibility of Delegates is to communicate the interests of local boards to CSBA's Board of Directors, Executive Committee and staff. Please describe your activities/involvement or interests in your local district or county office. This is a critical time for public education. The budget issues we all face, the need for the return of local control and continuing education reforms we face will impact all of our districts. As a member of the Delegate Assembly I play a significant role as changes are proposed and enacted making sure our collective Sonoma County voice is heard. I believe that it is the responsibility of all CSBA Delegates to provide representation to their region through serving as a voice for the districts they represent. I have served as a CSBA Governmental Relations Chair and as part of CSBA's Federal Governmental Relations Team for the past 7 years attending Legislative Actions Days in Sacramento and Washington D.C. I also attended the City, County and School Partnership (CCP) State Budget and Fiscal Reform Conference in 2010. As your delegate I will ensure effective communication throughout the county on issues affecting us in Sonoma County.

Why are you interested in becoming a Delegate and what contribution do you feel you would make as a member of the Delegate Assembly? I have been involved in CSBA since I was first elected 17 years ago, attending the CSBA annual conference 15 of the last 17 years. I earned my Masters of Boardmanship and have participated in many other trainings and workshops over the years. I was appointed by CSBA as a California Governmental Relations Chair and as a Federal Governmental Relations Chair, serving for the past 8 years. I bring a unique and diverse set of public, business and education experiences to the delegate Assembly. I have the ability and expertise to analyze issues from multiple perspectives. I understand the political process, have the experience and ability to make tough decisions, be creative and innovative. I want to make a positive difference for all students. I believe that my involvement locally and with CSBA at the State and Federal level have provided me with a strong base of skills and information to effectively serve as a member of the Delegate Assembly.

Your signature indicates your consent to have your name placed on the ballot and to serve as a Delegate, if elected.

Signature: [Handwritten Signature]

Date: 11/13/13

Edwin W. Gilardi
45 Nelson Lane
Cotati, CA 94931
ed_gilardi@sbcglobal.net
(707) 792-2526

SUMMARY OF EXPERIENCE

Elected Board of Trustees, Cotati Rohnert Park Unified School District 1996
Re-elected in 2000, 2004 and 2008
President Board of Trustees- 4 terms
Clerk Board of Trustees- 5 terms
Representative Sonoma County Committee on School District Organization-4 terms
CSBA Governmental Relations Chair-2005 to present
CSBA Federal Governmental Relations Chair- 2005 to present
CSBA Legislative Action Days Attendee- 8 years
CSBA Federal Governmental Relations Team- 4 years
CSBA and NSBA Presenter-"Dealing with the Media, Parents and Outside Influences
Involving Student Race Issues"
CBSA State Conference Attendee- 17 years
NSBA Conference Attendee- 7 years
CCSP Conference on Budget and Fiscal reform-2010
CSBA Master of Governance attendee
CSBA Masters of Boardmanship Degree
CSBA Annual Education Conference Planning Committee-2013
I have also attended several Sonoma County Office of Education workshops, covering
topics from, the Browns Act, State Budget and Technical Education programs

COMMUNITY ORGANIZATIONS AND INVOLVEMENT

PTA member-15 years
PTA Board member-5years
Education Foundation Board member-4 years
Education Foundation Advisory Board member- 17 years
Parcel Tax Committee member
Sonoma County Youth Education Program Leader-8 years
Sonoma County Youth Camp Program Board member- 7 years
Chairperson Cotati Kid's Day Festival- 6 years
Sonoma County Food Forum Conference Participant
Marin County Ag Summit Sub Committee Advisory Team Member
Cotati Historical Society Annual Fundraiser Committee

Community Acknowledgements

Cotati Citizen of the Year- 2002
Sonoma County Mary Karinen Memorial Mentoring Award- 2007
Sonoma County Adult and Youth Development Program Education Volunteer – 2011
Sonoma County Adult and Youth Development Program Community Volunteer - 2011

WEST SONOMA COUNTY UNION HIGH SCHOOL DISTRICT

TO: Kellie Noe, Board President

FROM: Keller McDonald, Superintendent

DATE: March 5, 2014

ITEM: **FIRST READING OF PROPOSED NEW COURSES AT ANALY HIGH SCHOOL: AP MUSIC THEORY, AP PHYSICS 1, AP PHYSICS 2, AND HONORS ART**

BACKGROUND INFORMATION:

The District must add, delete and adapt courses in the district curriculum as student needs and demands for career and college preparation change, as curriculum that is appropriate to high school changes, and as teaching approaches change. It is in the best interest of our students and communities to keep the district curriculum current with the available information, societal norms, career and college preparation trends, technology, student interests, and teaching approaches.

Board Policy 6143 defines the process to be followed in order to add new courses to the district curriculum. This policy requires that the courses of study stay consistent with the philosophy and goals of the district, and that they meet legal requirements. BP 6143 specifies that the course of study for each course taught in the district shall contain the following:

- Course title
- Brief statement of purpose of the course
- Standards of Expected Student Performance
- Course outline
- General estimate of time allocation for major course elements

In addition, BP 6143 specifies that, for new courses, the proposed course of study should also contain:

- Course justification statement
- Description of course development process
- Types and numbers of students to be served
- Number of sections to be offered
- Description of any instructor inservice needed
- Costs involved in implementing the new course
- Description of any courses and sections to be dropped and resulting cost savings

Changes are being proposed in the Honors and Advanced Placement (AP) courses offered at Analy High for 2014-2015. (Honors courses are designed to prepare students to successfully complete AP courses. Honors and AP courses are assigned a 5-point Grade Point Average (GPA) calculation. AP Music Theory is proposed as a new course, either to take the place of a current elective teaching section or added as a new section. AP Physics 1 and AP Physics 2 are proposed to replace current sections of AP Physics. Honors Art is a course that prepares students for AP Art, and is proposed as a course taught within the same teaching sections as Advanced Art and AP Art.

Andy Del Monte, Music Teacher, developed and submitted the AP Music Theory proposal. Jay Goldberg, Science Teacher, developed and submitted the AP Physics 1 and AP Physics 2 proposals. Tera Crawford, Art Teacher, developed and submitted the Honors Art proposal. The curricula presented in these proposals align with the Advanced Placement curricula recommended by the College Board, which manages the AP exams. These proposals have received endorsements from the appropriate Department Chairs and the Principals at El Molino and Analy High Schools, where Honors and AP classes are taught.

CURRENT CONSIDERATION:

This is a first reading of the new course proposals for AP Music Theory, AP Physics 1, AP Physics 2, and Honors Art.

RECOMMENDATIONS:

The administration recommends the Board have a first reading of the proposed course. Final approval of the new courses will be placed on the agenda of a subsequent Board meeting for action.

ATTACHMENTS:

Yes

West Sonoma County Union High School District
Request for New Course Approval

School(s) Where Course Will Be Taught: Analy High School

Course Title: AP Music Theory

Grade Level: Grade 10 through grade 12

Department: Fine Arts

Credits: Fine Arts

Types of Students: College preparatory, music students

Numbers of Students to be Served: 28 –32 per year (one section)

Number of Teaching Sections to be offered: one

Other courses and Sections Impacted: The dynamic of students choosing electives will have an impact on other classes. Otherwise, there are no anticipated impacts.

Purpose of the Course: AP Music Theory will provide students with a college level music theory and aural (listening) skills experience. Analysis, written and aural skills will be developed to prepare students for success on the advanced placement test for music theory, which has both written and aural sections.

Standards of Expected Student Performance: Students will be expected to analyze and write four-part music using conventional rules of tertian harmony, and they will also develop the skills to transcribe that music aurally. Students will understand pitch, intervals, scales, key signatures, tertian chord structure, chord progressions, voice leading, figured bass, chord inversions, and rules of four-part writing. Students will be able to demonstrate facility with these skills in written and aural music. Students will also learn to sight-sing music for single lines, as well as vertically regarding chord structure.

Course Outline: See attached

Methods of Student Evaluation: Students will be evaluated weekly with quizzes both written and aural. Students will also be quizzed frequently on their sight singing skills. Unit tests will consist of written and aural sections. Also, practice tests for the AP exam will be used for evaluation. Each semester will include a composition project. Written midterms and finals will also be given during each semester.

Justification, Course Development Process and Funding Support: Analy High School boasts one of the finest all-around music programs in Sonoma County. Because of this, we attract and foster excellent music students. Providing a music theory class of this nature will continue to foster those students interested in in-depth musical study, and it will also provide a class, which may help attract more music students to Analy High School.

By attending AP conferences, the curriculum for the class will stay current with college standards and curriculum for music theory and ear training.

The funding for this class will come from standard district sources, however, no classes are being cut to allow for AP Music Theory.


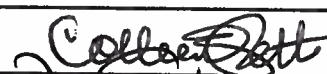
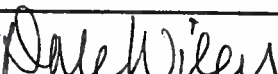



Description of any Instructor Inservice Needed and Sources of Funding this Inservice: The instructor will attend a conference for AP music theory this summer. Funding will come from NCLB.

Instructional Materials: No new materials are required

Costs involved in Implementing the New Course, and Sources of Funding for These Costs: As stated above, there are no other costs than the section.

New Course Request Submitted by: Andrew DelMonte

REQUEST FOR NEW COURSE REVIEWED AND APPROVED BY DEPARTMENT CHAIRS AND SITE ADMINISTRATORS

	Analy	El Molino	Laguna/CDS
Department Chair			
Site Administer			
Special Education	N/A	N/A	N/A

AP Music Theory Course Outline

Each unit is designed to be four weeks in duration culminating with a written theory exam.

Unit 1 – Music Reading/Theory Review

- Aural skills
 - Basic rhythms
 - Perfect/major/minor intervals
 - Solfeg in the major scale
- Written skills
 - Clefs
 - Notes on the staff (bass and treble clef)
 - Key signatures
 - Reading on the piano keyboard

Unit 2 – Major and Minor

- Aural skills
 - Identifying ascending and descending intervals
 - More rhythm
 - Major scale
 - Natural, Harmonic and Melodic Minor
 - Chromatic solfeg
- Written Skills
 - Movable clefs
 - Chord quality depending on scale degree
 - Key relationships
 - Enharmonics

Unit 3 – Basic Harmony

- Aural Skills

- Intervals beyond an octave
- More rhythm
- Arpeggiated chords
- Continued scale work
- Written skills
 - Three-note chords
 - Inversions
 - Figured bass
 - Chord function within key structures

Unit 4 – Influences of counterpoint

- Aural skills
 - The 7 modes in solfeg
 - Rhythm review
 - Arpeggios
- Written Skills
 - Basic rules of modal counterpoint and how they affect harmony
 - 7ths, 9ths and beyond
 - 4 note chords and inversions in figured bass
 - Conventional rules of voice leading

Unit 5 – Four Part Harmony

- Aural Skills
 - Rhythmic syncopation
 - Seventh chord inversions
 - Arpeggios in solfeg
- Written skills
 - Figured bass in Bach Chorales
 - Modulations using secondary dominants/diminished chords
 - Basic rules of four part harmony
 - Writing bass parts

Unit 6 – Voice Leading in four parts

- Aural skills
 - More rhythm and syncopation
 - Reading simple chord progressions vertically
 - Listening for chord progressions
- Written Skills
 - Harmonic rhythm
 - Conventional chord progressions
 - Writing inner parts
 - Writing modulations

Unit 7 – The Baroque Method

- Aural Skills
 - 4 part dictation
 - Sight singing four parts vertically in Bach Chorales
- Written Skills
 - Four part arranging of traditional melodies

- Modulating in and out of closely related keys

Unit 8 - Sequencing

- Aural skills
 - Longer 4 part dictation
 - Reading tenor and alto parts
 - Identifying chord progressions that modulate
- Written Skills
 - Augmented six chords
 - Modulation to and from distant keys
 - Basic Jazz Theory
 - Four part composition

Unit 9 – Basic Orchestration

- Different types of instruments
 - Wood winds
 - Brass
 - String
 - Percussion
 - Keyboard
- Transpositions
- Writing for various ensembles

**West Sonoma County Union High School District
Request for New Course Approval**



School(s) Where Course Will Be Taught: Analy

Course Title: AP Physics 1, AP Physics 2

Grade Level: 11, 12

Department: Science

Credits: 5 per semester

Types of Students (e.g. college preparatory, career technical education, special education, etc.) College prep

Numbers of Students to be Served: 60 - 90

Number of Teaching Sections to be offered: 2 - 3

Other Courses and Sections Impacted (including any courses or sections to be dropped and resulting cost savings): None

Purpose of the Course: This course replaces AP Physics B which will no longer exist.

Standards of Expected Student Performance: Success on exams, laboratory work, homework.

Course Outline and Time Allocation: See attached.
(Topics and objectives of each teaching unit; duration of each unit)

Methods of Student Evaluation: Tests, lab reports, problem sets

Justification, Course Development Process and Funding Support: The course is needed because the College Board is replacing the AP Physics B exam with AP Physics 1 and 2.

Description of any Instructor Inservice Needed and Sources of Funding this Inservice: Teacher to attend workshops.

Instructional Materials: (Will a current district-adopted text to be used, or will new text be recommended?) Text currently in use.

Costs Involved in Implementing the New Course, and Sources of Funding These Costs: NCLB or Science Department.

New Course Request Submitted by: Jay Goldberg

REQUEST FOR NEW COURSE REVIEWED AND APPROVED BY DEPARTMENT CHAIRS AND SITE ADMINISTRATORS

	Analy	El Molino	Laguna / CDS
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Department Chair	J ^{AHS}	^{ETS} via email - (KMS)	^{LAGUNA} N/A - (KMS)
Special Ed Dept Chair		N/A - (KMS)	N/A - (KMS)
Site Administrator	[Signature]	via email - (KMS)	N/A - (KMS)

Board Policy 6143 defines the process to be followed in order to add new courses to the district curriculum. This policy requires that the courses of study stay consistent with the philosophy and goals of the district, and that they meet legal requirements. BP 6143 specifies that the course of study for each course taught in the district shall contain the following:

- Course title
- Brief statement of purpose of the course
- Standards of Expected Student Performance
- Course outline
- General estimate of time allocation for major course elements

In addition, BP 6143 specifies that, for new courses, the proposed course of study should also contain:

- Course justification statement
 - Why is this course needed?
- Description of course development process
 - Who developed this course?
 - Who had input into the process?
 - Were potential teachers of this course at all District schools consulted?
 - If not, why not?
 - If so, what were their recommendations?
- Types and numbers of students to be served
- Number of sections to be offered
- Description of any instructor inservice needed
- Costs involved in implementing the new course
- Description of any courses and sections to be dropped and resulting cost savings

About the Advanced Placement Program[®] (AP[®])

The Advanced Placement Program[®] enables willing and academically prepared students to pursue college-level studies — with the opportunity to earn college credit, advanced placement, or both — while still in high school. AP Exams are given each year in May. Students who earn a qualifying score on an AP Exam are typically eligible to receive college credit and/or placement into advanced courses in college. Every aspect of AP course and exam development is the result of collaboration between AP teachers and college faculty. They work together to develop AP courses and exams, set scoring standards, and score the exams. College faculty review every AP teacher's course syllabus.

AP Physics Program

The AP Program offers four physics courses: AP Physics 1: Algebra-based, AP Physics 2: Algebra-based, AP Physics C: Mechanics, and AP Physics C: Electricity and Magnetism.

Guided by the National Research Council and National Science Foundation, the AP Program collaborated with college and university educators and AP teachers to develop two, yearlong AP Physics courses to replace AP Physics B.

AP Physics 1: Algebra-based and AP Physics 2: Algebra-based are the equivalent of the first and second semesters of introductory, algebra-based college courses. Because these courses are intended to be yearlong courses, teachers have time to foster deeper conceptual understanding through student-centered, inquiry-based instruction. Students have time to master foundational physics principles while engaging in science practices to earn credit or placement.

In addition, there are two AP Physics C courses: Physics C: Mechanics and Physics C: Electricity and Magnetism. Each corresponds to one semester of an introductory, calculus-based college course. Physics C: Mechanics is taught prior to Physics C: Electricity and Magnetism.

AP Physics 1: Algebra-Based Course Overview

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills.

LABORATORY REQUIREMENT:

This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.

PREREQUISITE:

Students should have completed geometry and be concurrently taking Algebra II or an equivalent course. Although the Physics 1 course includes basic use of trigonometric functions, this understanding can be gained either in the concurrent math course or in the AP Physics 1 course itself.

No prior course work in physics is necessary.

AP Physics 1 Course Content

Students explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. The following are Big Ideas:

- Objects and systems have properties such as mass and charge. Systems may have internal structure.
- Fields existing in space can be used to explain interactions.
- The interactions of an object with other objects can be described by forces.
- Interactions between systems can result in changes in those systems.
- Changes that occur as a result of interactions are constrained by conservation laws.
- Waves can transfer energy and momentum from one location to another without the permanent transfer of mass and serve as a mathematical model for the description of other phenomena.

Science Practices

Students establish lines of evidence and use them to develop and refine testable explanations and predictions of natural phenomena. Focusing on these disciplinary practices enables teachers to use the principles of scientific inquiry to promote a more engaging and rigorous experience for AP Physics students. Such practices require that students:

- Use representations and models to communicate scientific phenomena and solve scientific problems;
- Use mathematics appropriately;
- Engage in scientific questioning to extend thinking or to guide investigations within the context of the AP course;
- Plan and implement data collection strategies in relation to a particular scientific question;
- Perform data analysis and evaluation of evidence;
- Work with scientific explanations and theories; and
- Connect and relate knowledge across various scales, concepts, and representations in and across domains.

Inquiry-Based Investigations

Twenty-five percent of instructional time is devoted to hands-on laboratory work with an emphasis on inquiry-based investigations. Investigations will require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting, where they direct and monitor their progress.

AP Physics 1 Exam Structure

AP PHYSICS 1 EXAM: 3 HOURS

Assessment Overview

Exam questions are based on learning objectives, which combine science practices with specific content. Students learn to

- Solve problems mathematically — including symbolically
- Design and describe experiments and analyze data and sources of error
- Explain, reason, or justify answers with emphasis on deeper, conceptual understanding
- Interpret and develop conceptual models

Format of Assessment

Part I: Multiple Choice: 50 Questions | 90 Minutes | 50% of Exam Score

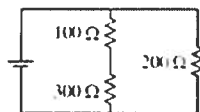
- Discrete items
- Items in sets
- Multimark items (two options are correct)

Part II: Free Response: 5 Questions | 90 Minutes | 50% of Exam Score

- Experimental Design (1 question)
- Quantitative /Qualitative Translation (1 question)
- Short Answer (3 questions, one requiring a paragraph-length argument)

AP PHYSICS 1 SAMPLE EXAM QUESTIONS

Sample Multiple-Choice Question

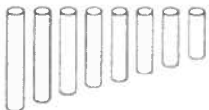


1. The figure above shows three resistors connected in a circuit with a battery. Which of the following correctly ranks the energy E dissipated in the three resistors during a given time interval?

- (A) $E_{300\Omega} > E_{200\Omega} > E_{100\Omega}$
- (B) $E_{300\Omega} > E_{100\Omega} > E_{200\Omega}$
- (C) $E_{200\Omega} > E_{300\Omega} > E_{100\Omega}$
- (D) $E_{200\Omega} > E_{100\Omega} > E_{300\Omega}$

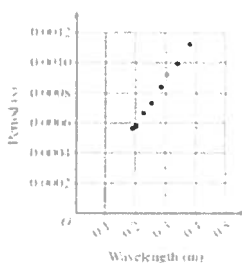
Correct Answer: C

Sample Free-Response Question: Experimental Design



You are given a set of chimes that consists of eight hollow metal tubes open at both ends, like those shown at left. The chimes are played by striking them with a small hammer to produce musical sounds. Your task is to use the chimes to determine the speed of sound in air at room temperature. You have available a set of tuning forks and other common laboratory equipment but are not allowed to use electronic equipment, such as a sound sensor. (A tuning fork vibrates when struck and produces sound at a particular frequency, which is printed on the tuning fork.)

- (A) Describe your experimental procedure in enough detail so that another student could perform your experiment. Include what measurements you will take and how you will take them.
- (B) Describe how you will use your measurements to determine the speed of sound in enough detail so that another student could duplicate your process.
- (C) Describe one assumption you made about the design of your experiment, and explain how it might affect the value obtained for the speed of sound.



- (D) A student doing a different experiment to determine the speed of sound in air obtained wavelength and period measurements and created the following plot of the data. Use the graph to calculate the speed of sound and include an explanation of your method.

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AP Physics Program

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Guided by the National Research Council and National Science Foundation, the AP Program collaborated with college and university educators and AP teachers to develop two, yearlong AP Physics courses to replace AP Physics B.

AP Physics 1: Algebra-based and AP Physics 2: Algebra-based are the equivalent of the first and second semesters of an introductory, algebra-based college course. Because these courses are intended to be yearlong courses, teachers have time to foster deeper conceptual understanding through student-centered, inquiry-based instruction. Students have time to master foundational physics principles while engaging in science practices to earn credit or placement.

In addition, there are two AP Physics C courses: Physics C: Mechanics and Physics C: Electricity and Magnetism. Each corresponds to one semester of an introductory, calculus-based college course. Physics C: Mechanics is taught prior to Physics C: Electricity and Magnetism.

AP Physics 2: Algebra-Based Course Overview

AP Physics 2 is an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills.

LABORATORY REQUIREMENT:

This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.

PREREQUISITE:

Students should have had AP Physics 1 or a comparable introductory course. Students should have taken or be concurrently taking precalculus or an equivalent course.

AP Physics 2: Algebra-Based Course Content

Students explore principles of fluids, thermodynamics, electricity, magnetism, optics, and topics in modern physics. The course is based on seven Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. The following are Big Ideas:

- Objects and systems have properties such as mass and charge. Systems may have internal structure.
- Fields existing in space can be used to explain interactions.
- The interactions of an object with other objects can be described by forces.
- Interactions between systems can result in changes in those systems.
- Changes that occur as a result of interactions are constrained by conservation laws.
- Waves can transfer energy and momentum from one location to another without the permanent transfer of mass and serve as a mathematical model for the description of other phenomena.
- The mathematics of probability can be used to describe the behavior of complex systems and to interpret the behavior of quantum mechanical systems.

Science Practices

Students establish lines of evidence and use them to develop and refine testable explanations and predictions of natural phenomena. Focusing on these disciplinary practices enables teachers to use the principles of scientific inquiry to promote a more engaging and rigorous experience for AP Physics students. Such practices require that students:

- Use representations and models to communicate scientific phenomena and solve scientific problems;
- Use mathematics appropriately;
- Engage in scientific questioning to extend thinking or to guide investigations within the context of the AP course;
- Plan and implement data collection strategies in relation to a particular scientific question;
- Perform data analysis and evaluation of evidence;
- Work with scientific explanations and theories; and
- Connect and relate knowledge across various scales, concepts, and representations in and across domains.

Inquiry-Based Investigations

Twenty-five percent of instructional time is devoted to hands-on laboratory work with an emphasis on inquiry-based investigations. Investigations will require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting, where they direct and monitor their progress.

AP Physics 2 Exam Structure

AP PHYSICS 2 EXAM: 3 HOURS

Assessment Overview

Exam questions are based on learning objectives, which combine science practices with specific content. Students learn to:

- Solve problems mathematically — including symbolically
- Design and describe experiments and analyze data and sources of error
- Explain, reason, or justify answers with emphasis on deeper, conceptual understanding
- Interpret and develop conceptual and mathematical models

Format of Assessment

Part I: Multiple Choice: 50 Questions | 90 Minutes | 50% of Exam Score

- Discrete items
- Items in sets
- Multimark items (two options will be correct)

Part II: Free Response: 4 Questions | 90 Minutes | 50% of Exam Score

- Experimental Design (1 question)
- Quantitative /Qualitative Translation (1 question)
- Short Answer (2 questions, one requiring a paragraph-length argument)

AP PHYSICS 2 SAMPLE EXAM QUESTIONS

Sample Multiple-Choice Question

A student writes the following information for a process that involves a fixed quantity of ideal gas.

$$W = -P\Delta V$$

$$\Delta U = Q + W$$

$$P = 2.0 \times 10^5 \text{ Pa}$$

$$\Delta V = -2.0 \times 10^{-3} \text{ m}^3$$

$$\Delta U = -600 \text{ J}$$

Which of the following descriptions best represents the process?

- (A) The gas expands at a constant pressure of 200 kPa.
- (B) The gas is cooled at constant volume until its pressure falls to 200 kPa.
- (C) The gas is compressed at a constant pressure of 200 kPa.
- (D) The gas is heated and its pressure increases at constant volume.

Correct Answer: C

Sample Free-Response Question: Experimental Design



Quantitative/Qualitative Translation

The figure at left represents a glass lens that has one flat surface and one curved surface. After incoming parallel rays pass through the lens, the rays pass through a focal point.

- (A) The rays undergo refraction and change direction at the right surface of the lens, as shown. Explain why the angle of refraction of ray 1 is greater than that of ray 2.
- (B) The index of refraction of the glass is n_{glass} , and the radius of curvature of the lens's right edge is R . (The radius of curvature is the radius of the sphere of which that edge is a part. A smaller R corresponds to a lens that curves more). A teacher who wants to test a class's understanding about lenses asks the students if the equation $f = n_{\text{glass}} R$ makes sense for the focal length of the lens in air. Is the teacher's equation reasonable for determination of the focal length? Qualitatively explain your reasoning, making sure you address the dependence of the focal length on both R and n_{glass} .
- (C) An object is placed a distance $f/2$ (half of the focal length) to the left of the lens. On which side of the lens does the image form, and what is its distance from the lens in terms of f ? Justify your answer. (Assume this is a thin lens.)
- (D) The lens is now placed in water, which has an index of refraction that is greater than air but less than the glass. Indicate below whether the new focal length is greater than, less than, or equal to the focal length f in air.
 Greater than in air
 Less than in air
 The same as in air

Justify your answer qualitatively, with no equations or calculations.

**West Sonoma County Union High School District
Request for New Course Approval**

School(s) Where Course Will Be Taught: Analy

Course Title: Honors Art

Grade Level: Junior/Senior

Department: Art

Credits: 10

Types of Students : College Prep

Numbers of Students to be Served: up to 34

Number of Teaching Sections to be offered: 1 within an Advanced Art section

Other Courses and Sections Impacted (including any courses or sections to be dropped and resulting cost savings): none

Purpose of the Course: To bridge the gap between Advanced art and AP art

Standards of Expected Student Performance: see attachment

Course Outline and Time Allocation: see attachment

Methods of Student Evaluation: Assignment grades, art critique participation and portfolio

Justification, Course Development Process and Funding Support: see attachment

Description of any Instructor Inservice Needed and Sources of Funding this Inservice: none

Instructional Materials: Same as AP art

Costs Involved in Implementing the New Course, and Sources of Funding These Costs: 0

New Course Request Submitted by: Tera Crawford

REQUEST FOR NEW COURSE REVIEWED AND APPROVED BY DEPARTMENT CHAIRS AND SITE ADMINISTRATORS

	Analy	El Molino	Laguna /CDS
Department Chair			
Special Ed Dept Chair			
Site Administrator			

Board Policy 6143 defines the process to be followed in order to add new courses to the district curriculum. This policy requires that the courses of study stay consistent with the philosophy

Request for Course Approval for Analy High School

Course Title: Honors Art

Grade level: Junior / Senior

Department: Art

Number of Teaching Sections to be Offered: One within Advanced Art

Other Courses and Sections Impacted: none

Purpose of the Course: To provide the opportunity for a higher level of arts education for students who aspire to an advanced level of art making and learning. Honors Art offers a 3rd level to bridge the gap between the Advanced course and the very rigorous and demanding AP Art course, (4th year).

Standards of Expected Student Performance: Students develop mastery in concept, composition and execution of drawing, painting, 2-D design and mixed media. Students will develop a portfolio, a cohesive body of work with a range of technique and problem solving. Student will be expected to spend 3-5 hours a week on artwork outside of class. Students will photograph and use Photoshop to create a digital portfolio of 20 art pieces.

Course Outline: The first semester students will focus on a range of techniques in drawing, painting, printmaking, scratchboard, and mixed media. Students will practice proportion, perspective, expression, value, and composition. This semester's body of work is exemplary of the student's understanding and mastery of the Elements of Art and the Principals of Design.

The second semester students will develop and explore a particular visual idea or concept. This body of work should reflect a process of investigation and discovery through a series of conceptually related works.

At the end of each semester students will photograph their artwork and use Photoshop to create a digital portfolio. This provides the students with the necessary skills for preserving their images, presenting their work professionally, which they can use for college and scholarship applications.

Justification, Course Development Process and Funding Support: I will model this course after the AP art course that I teach, but with a less rigorous agenda and a slower pace. Since this course is offered within the Advanced Art and AP class there is no extra funding needed to add this course. Funds for materials come from student donations and grants.

There is a need to provide students with a more challenging class than Advanced Art. Many 3rd year students are applying for AP art and then finding that it is too demanding. Several students ask to drop each year. In an effort to minimize the drop rate and student discouragement, as well as the discrepancy between the levels of art offered, it is necessary for Analy Arts to offer an Honors Art course.

IV.H./MAR.5.14

WEST SONOMA COUNTY UNION HIGH SCHOOL DISTRICT

TO: Kellie Noe, Board President
FROM: Keller McDonald, Superintendent
DATE: March 5, 2014
ITEM: **FIRST READING OF RECOMMENDED REVISIONS TO BOARD POLICY 5121.1 ATTENDANCE AND TARDIES RELATING TO CREDITS**

Background Information:

Over twenty years ago, the District adopted a policy that links the number of credits a student earns in each course to the student's participation in class. The credits earned in a course are calculated on the basis of the percentage of class periods attended during the semester. This policy relates to credits, not to grades assigned for classroom performance.

The state regulations defining excused absences have changed since the District policy was last revised. Excused absences must now be considered equivalent to participating in class for the purpose of granting credit toward graduation. However, arriving tardy to class more than five minutes after the start of class without excuse may be considered an unexcused absence for the purpose of calculating course credits.

Current Consideration:

A recent review of Board Policy 5121.1 Attendance and Tardies Relating to Credits showed that minor changes in this policy were needed to specify that course credits would continue to be earned for excused absences, and to define "tardy-absence" as an unexcused absence for the purposes of earning course credit. The recommended revisions to BP 5121.1 align Board Policy with current practice in our schools and the terminology used in our school attendance reporting system.

Recommendations:

Administration recommends the Board have a first reading of recommended revisions to BP 5121.1 Attendance and Tardies Relating to Credits. At the direction of the Board, this matter can be put on a subsequent Board agenda as an action item.

Attachments:

BP 5121.1 showing recommended revisions to current policy

Students

ATTENDANCE AND TARDIES RELATING TO CREDITS

- A. Units of credit are earned by students each semester for course participation according to the following schedule:

Days of Course Participation	Percentage	Units of Credit Earned
0 - 15	0 - 17%	0
16 - 31	18 - 35%	1
32 - 47	36 - 52%	2
48 - 63	53 - 70%	3
64 - 79	71 - 88%	4
80 - --	89 - 100%	5

This schedule is based upon 90 days in a semester or 45 days each quarter. The schedule should be adjusted each semester to reflect less or more days.

1. A day of participation is defined as attendance and participation *or excused absence* for one (1) class period.
2. A tardy is when a student arrives within five (5) minutes after the tardy bell.

Analy/El Molino

A tardy shall be handled according to school discipline rules as stated in Administrative Regulation 5144

Laguna/Community Day School

- a. First three (3) tardies to class – no penalty
 - b. Fourth (4th) tardy and every tardy thereafter, will count as one (1) day of absence.
 3. ~~An absence~~ **A tardy-absence** is when a student arrives six (6) minutes or more after a class starts (regardless of the reason for said absence except as named in B below).
- B. If a student is taking part in a school activity (such as a field trip, athletic contest, drama performance, music performance, etc.) during assigned class periods, the student will not be counted absent or tardy if prior permission from the teacher is obtained **BEFORE** missing the class.

Calls to the nurse’s office, counselor’s office or administration office will not be counted as absent or tardy if the student has a pass.