NEVADA STATE BOARD OF EDUCATION
NEVADA STATE BOARD FOR CAREER AND TECHNICAL EDUCATION

SUPPORTING DOCUMENT

SUBJECT: Academic Credit for CTE Coursework

/ /	Public Workshop
/ /	Public Hearing
/ /	Regulation Adoption
/ /	Approval
/ /	Appointments
/ /	Receive
/ /	Information/Discussion
/X/	Action

MEETING DATE: 09/01/16
AGENDA ITEM #
NUMBER OF ENCLOSURE(S): 1

PRESENTER(S): Anne Willard

RECOMMENDATION: Approval of the Academic Credit for CTE Coursework

FISCAL IMPACT* (See notes on Page Two): **None**

BUDGET ACCOUNT (FOR PRINTING CHARGES ONLY): 2676

LENGTH OF TIME EXPECTED FOR PRESENTATION (IN MINUTES): Consent Agenda

BACKGROUND: NAC 389.672 defines the academic credits a student may earn and the procedures that must be followed by a local school district or charter school to qualify CTE courses for academic credit. With approval from the State Board of Education, a board of trustees may allow a pupil to earn the following units necessary for graduation from high school by taking CTE coursework:

- Two units of credit required in English
- One unit of credit required in mathematics
- One unit of credit required in science and
- One-half unit required in health

School district applications for academic credit for CTE coursework have been submitted by Douglas, Lander, and Lyon County School Districts.

Anne Willard has worked collaboratively with Andre DeLeon of the Nevada Department of Education Office of Standards and Instructional Support during the review process.

The application submitted by Douglas County School District includes the following:

- Nevada Academic Content Standards - Science alignment documents for Agriculture Science I and II; and for Principles of Biomedical Sciences and Human Body Systems
- a statement of the academic credit to be granted

- the appointment of committee members (embedded in the letter to the Nevada State Board of Education dated June 27, 2016 –Roger Cramer, Madeline Cronk, and Robin Futchs)
- a copy of the minutes with a motion to approve from the April 12, 2016 Douglas County Board of Trustees meeting
- a copy of the student notification letter.

The application submitted by Lander County School District includes the following:

- Nevada Academic Content Standards - Science alignment documents for Agriculture Science I and II
- a statement of the academic credit to be granted
- letter of appointment of the committee members; CTE Committee Chair, Walt Holland
- a copy of the minutes with a motion to approve from the Lander Board of Trustees meeting April 27, 2016
- a copy of the student notification letter
- Please note changes in action, letter dated April 25, 2016, Battle Mountain High School/Lander County School District – the request being made to the State Board of Education at this time is for academic approval for Agriculture Science I and II, with one science credit to count toward meeting graduation requirements upon completion of Agriculture Science II. The request made for academic credit to be awarded for Health Science and Veterinary Science has been withdrawn.

The application submitted by Lyon County School District includes the following:

- Nevada Academic Content Standards – Science alignment documents for Agriculture Science I and II and Health Science I and II
- a statement of the academic credit to be granted
- a letter of invitation to serve on the review committee, committee members: Crystal Mattice, Tamra Herschbach, and Rick Walker
- a copy of the minutes with a motion to approve from the June 28, 2016 Lyon County Board of Trustees meeting
- a copy of the student notification letter.

SUBMITTED BY: Mike Raponi, Office of Career Readiness, Adult Learning & Education Options

Douglas County School District

1638 Mono Avenue • Minden, Nevada 89423

Information

Phone: (775) 782-5134
Fax: (775) 782-3162
www.dcsd.k12.nv.us

Administration

Teri White
Superintendent
(775) 782-5135

Education Services

Christi Hines-Coates
Director, Area 1
(775) 265-5262

Brian Frazier
Director, Area 2
(775) 782-5160

Rommy Cronin
Director, Area 3
(775) 782-7170

Brandon Swain
Director, Area 4
(775) 782-7179

Business Services

Holly Luna
Chief Financial Officer
(775) 782-5131

Human Resources

Keith Lewis
Director
(775) 782-7177

June 27, 2016

Nevada Department of Education
700 E. Fifth Street
Carson City, NV 89701

State Board of Trustees,

This letter is requesting that the Nevada State Board of Education approve academic credit for Career and Technical Education courses as described in the Nevada Administrative Code 389.672.

On January 29, 2016, Roger Cramer, a certified secondary science teacher in the state of Nevada met with Madeline Cronk, a certified secondary teacher in Nevada to review the alignment of the CTE coursework in Project Lead the Way – Principals of Biomedical Science and Project Lead the Way – Human Body Systems with current biology curriculum taught in the Douglas County School District. Mr. Cramer also met with Robin Futchs, a certified secondary teacher in Nevada to review the alignment of the CTE coursework in Agricultural Science I and II with the current curriculum taught in the Douglas County School District. The outcome of those meetings was that, NGSS the Science Standards, taught through these courses will align with the current courses when delivered in 2016-2017 and 2017-2018.

On April 12, 2016, the Douglas County School District Board of Trustees approved 1 unit of science credit for the following 2 year sequence of Career and Technical Education courses:

- Agricultural Science I (year 1) and II (year 2)
- Project Lead the Way-Principals of Biomedical Science (year 1) and Project Lead the Way-Human Body Systems (year 2)

The course descriptions are provided.

A sample letter to parents regarding post-secondary determination of acceptance of credit is also provided.

The Douglas County School District Board of Trustees assures that the coursework delineated in Agricultural Science I and II, Project Lead the Way – Principals of Biomedical, and Project Lead the Way-Human Body Systems will not deviate from the curriculum approved by the State Board of Education.

Thank you for your consideration of academic credit for Career and Technical Education courses.

Sincerely,

Brandon Swain
Director of Education Services – Area 4
Douglas County School District

Board Overview Document

This is a one page Board summary document to be provided as a cover sheet for Action Items.

Why is this **a Board** action **item**?
A new process for providing High School Science Credit for Career and Technical Education classes has been established (see Memorandum 1/8/16). Douglas County School District currently offers 2 CTE courses – Agricultural Science I & II, and Biomed I & II that closely align with NVACS in Science. Local Schools boards must initially approve Science credit to advance the process to the State Board.

Which Strategic Plan goal does this request relate to and how?
Curriculum and Instruction

Which NRS, NAC, **District Policy**, Administrative Regulation, etc. does this **relate to**?
NAC 389.672 – procedures for qualifying CTE courses for academic credit
NAC 389.673 – procedures for period review and approval of CTE courses

What is the **Fiscal Impact** or potential fiscal impact?
None.

Pros to approving this action	**Cons** to approving this action
• Provides flexibility for students who are pursuing CTE pathways to get Science credit • Increases breadth of CTE coursework to encompass additional Science Standards • Creates another pathway that enables all students to get all Science Standards	

Implications **if not acted upon** at this meeting?
Students taking either Ag Science I & II or Biomed I & II will not receive Science Credit in 2016-2017.

What is the **Superintendent's recommendation**?
Approve 1/2 Science credit for each year of Biomed (I & II) and Ag Science (I & II).

Douglas County School District
Lake Tahoe Visitors Authority – Visitors Center
Tuesday, April 12, 2016
3:30 p.m.

Minutes Approved May 18, 2016

MINUTES

Present:

Trustees:
Ross Chichester, President
Neal Freitas, Vice President
Karen Chessell, Board Member
Robbe Lehmann, Member
Teri Jamin, Member
Thomas Moore, Member

Absent: Cynthia Trigg, Clerk

Personnel:
Keith Lewis, Director Human Resources
Brian Frazier, Director Area 2
Rommy Cronin, Director Area 3
Brandon Swain, Director Area 4
Holly Luna, Chief Financial Officer

Absent: Teri White, Superintendent

Others Present:
Mike Malloy, Legal Counsel

1. Call to Order
(For Possible Action)

Mr. Chichester called the meeting to order at 3:31 p.m. Mr. Moore led the Pledge of Allegiance.

Mrs. Chessell moved to adopt the agenda, seconded by Ms. Jamin.

Mr. Chichester called for public comment. There was none.

Motion carried, 6/0.

2. Consent Items
(For Possible Action)

Mr. Chichester called for any Consent Items to be pulled. Items 2-A, 2-B, 2-C and 2-D were pulled from the Consent Agenda.

Mr. Chichester called for public comment. There was none.

Mr. Freitas moved to approve the Consent Agenda with the exception of Items 2-A, 2-B, 2-C and 2-D, seconded by Mrs. Chessell.

Motion Carried, 6/0.

A. Approve the Minutes of the Regular Board Meeting of March 8, 2016.

Mr. Moore agreed with the explanation Ms. Luna provided. A balanced self-insured fund would allow for continual expenditures necessary to daily operations. The fund would include an ending fund balance to be used similarly to a savings account. Mr. Moore asked that the Committee establish the ending fund balance and create a plan wherein the fund would maintain itself. Trustees shook their heads yes, agreeing with both explanations.

Mr. Chichester added that the fund should be balanced to actual figures, and if a catastrophic year occurred, an adjustment to the ending fund balance would need to be made to accommodate the unusual spike, at that time.

Ms. Luna reviewed the process and timeline that drove the Committee, Board approval along with the involvement of the Broker. The Broker provided the Committee projections based on 12 months of health insurance claims. State and national trends are analyzed. The projections are based on a combination of the historical data and trend analysis. As required by contract language along with implementation requirements and open enrollment, November is the month the Committee would address the Board to look at changes or additions to the health insurance plan.

Mr. Fromdahl asked for further clarification and additional detail to which Mr. Moore indicated that was the task of the Committee – to present a recommendation for board review. Mr. Fromdahl added the Committee completes their review of information in October and presents the results to the Board in November. It was noted the Committee is governed by the Negotiated Agreement.

12. Superintendent Evaluation Process
(Discussion and For Possible Action)

Mr. Chichester stated the Board was provided with a number of templates for evaluating the superintendent. Mr. Chichester suggested the conversation be held until next month when Mrs. White would be present. The superintendent contract dictated a timeline that could still be followed.

Consensus was to put this discussion off until next month.

13. Career Technical Education (CTE) Courses for Science Credit
(Discussion and For Possible Action)

Brandon Swain, Education Services Director Area 4, reported on guidance for CTE coursework in the area of Biomed I and II; and Agricultural Science I and II. These courses could accommodate credits for students at this time. Should the Board approve this credit allowance, the State Board would then need to approve the award of credit to students. Preliminary work had been accomplished in order that the new courses encompassed Science Standards that align with NVACS for science. Both courses aligned with life science and biology. Teachers at Douglas High School who taught science supported having students earn credit for having taken Biomed and Agricultural Sciences. Small additions and adjustments would need to be made within the curriculum. The courses would create flexibility through having an additional pathway for students to obtain necessary science standards, prior to graduation.

Mr. Swain asked the Board to approve .5 science credit for each year of both Biomed (I & II) and Agricultural Science (I & II).

The credential necessary to teach these courses was noted to be CTE, rather than science.

Mr. Chichester called for public comment.

Phil Sorenson, GWHS science teacher, stated possible ramifications with Biomed being added at GWHS. The concern was if a science teacher was asked to teach Biomed, there would not be enough teachers to then teach other science courses necessary. Scheduling sections within the smaller school was noted to be more difficult. Project Lead the Way curriculum was scheduled to be implemented, but no details were available to teachers.

Mr. Lewis stated the issue of whether or not more teachers would be required is a different topic than approval of credit for the CTE courses.

Mr. Swain added if for any reason the courses could not be offered at GWHS then they could be available only to students at DHS. Conversations regarding implementation were still underway.

> Mr. Moore moved to approve .5 science credit for each year of Biomed (I&II) and Agricultural Science (I & II), seconded by Mr. Freitas.

Motion carried, 6/0.

14. PK-5 Math Textbook Adoption Committee
(Discussion and For Possible Action)

Rommy Cronin, Education Services Director, Area 3, reported on the PK-5 Math Textbook Advisory Committee findings regarding the options available for adopting new elementary textbooks. The major shift in teaching is conveying conceptual understanding to students.

Representatives from all elementary schools participated in the open public committee meetings. Five products were evaluated according to State guidelines using an instructional materials evaluation tool. Products were examined to assure critical content aligned to standards. The committee ultimately recommended not adopting any of the five products, due to concerns that none met the standards. At this time it is recommended teachers continue on the path of teaching Eureka Math. The need exists to have math materials for teachers; although, since adoption of Common Core Standards in 2010, no teaching materials meeting the new standards have been available. Teachers worked to put together bits and pieces of curriculum to fill the curriculum needs for several years. Online resources were used; but were not consistent among grade levels. Site level Professional Learning Communities (PLC's) worked with the Professional Development Center (PDC) to translate curriculum guides that were available at minimal costs. A decision was made to have teachers pilot Eureka Math in order to provide students consistent math materials. Training had been provided and a number of options given to teachers with regard to attendance at professional development events, some offered outside of classroom time. Two trainers paid by NWRPD worked with individual teachers as needed. Online training and lesson modeling had been provided for implementation of the Eureka Math curriculum.

EdReports had a review team that evaluated elementary math materials for use across the country. Research had been conducted on eleven commonly used rubrics for educators nationwide. Two DHS teachers had gone through training designed by EdReports to evaluate texts.

The Committee was commended for working hard to use the same questions EdReports developed, to evaluate materials. It was found that none of the products among the five examined were at the proper standards level. Eureka math was the best option, due to those materials being the only option that met standards; although, Eureka Math was met with a lot of criticism. During the Eureka Math pilot, teachers used additional supplemental materials. Minden and Jacks Valley Elementary Schools had piloted Eureka Math with good success. All District elementary teachers had been teaching Eureka Math, some for a second school year. Ms. Cronin brought the Eureka Math textbooks to this meeting and offered them for review. Contracts entered into between Districts and textbook companies for purchase of books, once adopted, equaled 7 years. A K-12, all grade level adoption of materials of only one publisher's materials had not taken place in the past. Two company's resources had been adopted that created math consistency through the grade levels. This was noted due to the recommendation for adoption of secondary math texts being McGraw Hill-Glencoe in the next Agenda Item.

The five texts analyzed by the Committee and the names of the publishers were stated. McGraw Hill-Glencoe texts were reviewed by EdReports and had subsequently been rewritten in order that a 2016 version could be available (note yet released). One new product, *My Math*, had also come available since the adoption process allowing for these two products to be reviewed in the future.

Mrs. Cronin reported having asked teachers what improvements could be made in an effort to best support the program. Many responses were provided with suggestions for changes. Board members were asked to consider survey information when making their decision.

Curriculum Alignment Document

Agriculture Science I and II/ Academic Science Credit

Proposed Academic Credit for (Check One): _____ English _____ Math __X__ Science ***Note:*** *When applying for Academic Science credit and not replacing a science course (e.g. Biology) standards alignment may include NVACSS from Physical Science, Life Sciences, Earth and Space Sciences, and/or Engineering Design*	
Name of Academic Course:	
Name of Academic Content Standards: Nevada Academic Content Science Standards	
Name of CTE Course (s): Agriculture Science I and II	
Include all standards or other specific learning objectives taught in the CTE course(s). Reference the CTE standard number	**List the corresponding academic content academic standard code:**
Example: Differentiate between a plant and animal cell (Ag. Sci. 6.2.2)	*Example: HS-LS1-2*
Explain that agriculture is a science (Ag. Sci. 1.1.2)	HS-LS4-4 HS-ESS3-1
Discuss the role of modern agriculture in basic human nutrition (1.1.5)	HS-ESS3-3 HS-ESS3-1
Organize the major technological developments that have occurred in agriculture (1.2.2)	HS-ESS3-4
Explain the role of government in the world's food supply (1.3.2)	HS-ESS3-1
List the steps of the scientific method (4.1.1)	HS-ETS1-2
Explain the steps in conducting research in agriculture, and conduct an appropriate research project (4.1.2)	HS-ETS1-2
Organize the major parts of a research report (4.1.3)	HS-ETS1-3
Determine the metric prefixes and units used for measuring length, volume weight, temperature, and area (4.3.2)	HS-LS2-1
Convert from one system of units to another system of units (4.3.3)	HS-LS2-1

Demonstrate proper us of common agriscience equipment (4.4.3)	HS-LS2-5 HS-LS3-2
Explain a cell's role and compare and contrast the types of cells (prokaryotic/eukaryotic)(5.2.1)	HS-LS1-1
Analyze the components of an animal cell and explain their functions (5.2.2)	HS-LS1-1
Define cell theory and examine the importance of mitosis (5.2.4)	HS-LS1-4
Identify and describe the stages of meiosis I and II (5.2.5)	HS-LS3-1 HS-LS3-2
Analyze the role of meiosis in spermatogenesis and oogenesis (5.2.6)	HS-LS3-2 HS-LS3-3
Compare and contrast mitosis and meiosis (5.2.7)	HS-LS3-2 HS-LS3-4
Analyze the effects of DNA sequencing on crossbreeding (5.3.3)	HS-LS3-3
Identify the major parts and describe the functions of the digestive system in livestock (5.4.1)	HS-LS1-1
Analyze the major nutrients and their importance to animals (5.4.2)	HS-LS1-6 HS-LS1-7 HS-LS2-4
Identify two categories of disease and determine the causes of each (5.5.2)	HS-LS3-2
Recognize the two categories of immunity and compare the types in each category (5.5.3)	HS-LS1-2
Identify good animal health management practices (5.5.4)	HS-LS3-3
State the classification and naming of plants (6.1.1)	HS-LS4-2
Distinguish two major groups of plants (6.1.2)	HS-LS4-2 HS-LS1-2
Compare the classification of plants by life cycle (6.1.3)	HS-LS1-5
Label the parts of a plant cell (6.2.1)	HS-LS4-1
Differentiate between a plant and animal cell (6.2.2)	HS-LS1-2
State the function of plant cell organelles (6.2.3)	HS-LS1-2

Analyze the process of photosynthesis (6.3.1)	HS-LS1-5
Formulate the process of cellular respiration (6.3.2)	HS-LS1-7 HS-LS2-3
Describe plant growth processes (6.3.3)	HS-LS1-7
Summarize why photosynthesis and respiration are important to human beings (6.3.4)	HS-LS2-5
Identify and describe the parts of a flower (6.4.1)	HS-LS4-1
Explain the purpose of a flower (6.4.2)	HS-LS4-2
List different types of flowers (6.4.3)	HS-LS4-2
Describe the difference between monocot and dicot flowers (6.4.4)	HS-LS1-4
Explain the importance of plant propagation (6.5.1)	HS-LS1-4 HS-LS3-3
Compare the difference between sexual and asexual propagation (6.5.2)	HS-LS2-8 HS-LS3-1 HS-LS3-3
Demonstrate asexual propagation (6.5.3)	HSlKS2-8 HS-LS3-1 HS-LS3-3
Differentiate between macronutrients and micronutrients (6.6.1)	HS-LS1-2
Describe pH and how it is modified (6.6.2)	HS-LS4-4
Describe the components of a fertilizer (6.6.3)	HS-LS2-5
Categorize the methods of safely applying agricultural chemicals to crops (6.6.4)	HS-LS2-5
Explain the role of agriculture chemicals in crop production (6.6.5)	HS-LS2-5
List the components of soil (7.1.1)	HS-ESS2-1 HS-ESS2-2 HS-ESS2-3
Describe the concept of soil texture and its importance (7.1.2)	HS-ESS2-2

Classify the texture of a soil sample (7.1.3)	HS-ESS2-2
Identify various soil structures, their formation, and importance in agriculture production (7.1.4)	HS-ESS2-5
Define soil erosion and describe the two classes of erosion (7.2.1)	HS-ESS2-5
Identify the causes of soil erosion and the steps in the erosion process (7.2.2)	HS-ESS2-2 HSESS2-5
Identify basic career information related to soil science (7.3.1)	HS-ESS2-3
Classify greenhouse designs (8.2.1)	HS-ETS1-3
Review consideration for greenhouse frameworks (8.2.2)	HS-ETS1-3
Identify and describe glazing materials (8.2.3)	HS-ETS1-2
Describe the functions of the headhouse (8.2.4)	HS-ETS1-2
List greenhouse bench options (8.2.5)	HS-ETS1-2
Define and identify types of natural resources (10.1.1)	HS-LS2-5
Distinguish between renewable and nonrenewable resources (10.1.2)	HS-LS2-4 HS-LS2-5
Compare the difference between inexhaustible and exhaustible resources (10.1.3)	HS-LS2-4
Recognize how humans use natural resources (10.2.1)	HS-ESS3-3
Identify the urban and rural impacts of natural resource use (10.2.2)	HS-ESS1-1 HS-ESS3-2 HS-ESS3-3 HS-ESS3-4
Analyze the impact of recycling and reusing resources (10.2.3)	HS-ESS3-2 HS-ESS3-4
Critique the importance of conservation and preservation (10.3.1)	HS-ESS3-4
Identify the effects of humans on the environment, including the greenhouse effect (10.3.2)	HS-ESS-3-4 HS-LS4-6

Identify types of natural resource damage (10.3.3)	HS-ESS3-1
Define ecology and ecosystems (10.4.1)	HS-LS2-1
Explain natural selection and succession (10.4.2)	HS-LS2-8 HS-LS3-2 HS-LS4-4
Identify biomes and explain ecosystem diversity (10.4.3)	HS-LS2-6
Diagram and explain the nitrogen, phosphorus, carbon, and water cycle (10.4.4)	HS-ESS2-5 HS-ESS2-6 HS-LS2-4 HS-LS2-5
Identify Nevada's bioregions (10.5.1)	HS-LS2-6
Explain effects of invasive species (10.5.2)	HS-LS2-6
Explain six rangeland management concepts (10.5.3)	HS-LS2-7

Curriculum Alignment Document

Project Lead the Way – Principles of Biomedical Science and Human Body Systems

Proposed Academic Credit for (Check One): _____ English _____ Math ___X___ Science ***Note:*** *When applying for Academic Science credit and not replacing a science course (e.g. Biology) standards alignment may include NVACSS from Physical Science, Life Sciences, Earth and Space Sciences, and/or Engineering Design*	
Name of Academic Course:	
Name of Academic Content Standards: Nevada Academic Content Science Standards	
Name of CTE Course (s): Principles of Biomedical Science & Human Body Systems	
Include all standards or other specific learning objectives taught in the PLTW course(s).	List the corresponding academic content academic standard code:
Example: Differentiate between a plant and animal cell (Ag. Sci. 6.2.2)	*Example: HS-LS1-2*
Content Standards for Project Lead the Way - Principles of Biomedical Science	
From Molecules to Organisms: Structures and Processes - Structure and Function	DCI - LS1.A HS-LS1-2
From Molecules to Organisms: Structures and Processes	HS.LS1.1 HS.LS1.2 HS.LS1.3 HS.LS1.4 HS.LS1.6
Heredity: Inheritance and Variation of Traits	HS.LS3.1 HS-LS3-2 HS.LS3.3 DCI - LS3.A DCI - LS3.B
Energy - Conservation of Energy and Energy Transfer	DCI - PS3.B
From Molecules to Organisms: Structures and Processes - Organization for Matter and Energy Flow in Organisms	DCI - LS1.C
Ecosystems: Interactions, Energy, and Dynamics	HS.LS2.5
Matter and Its Interactions - Structure and Properties of Matter	DCI - PS1.A DCI - LS2.B HS-LS2-3
Biological Evolution: Unity and Diversity	HS.LS4.3

	DCI - LS4.B
Energy - Definitions of Energy	DCI - PS3.A
Engineering Design - Developing Possible Solutions	DCI - ETS1.B DCI - ETS1.C HS.ETS1.2 HS.ETS1.4 DCI - ETS1.C HS-LS3-2 DCI - ETS1.2 HS.ETS1.3
Please note that the NGSS Cross cutting Concepts and some Engineering Practice Standards were not included in this alignment though are an integral part of this coursework.	
Content Standards for Project Lead the Way - Human Body Systems	
From Molecules to Organisms: Structures and Processes	HS.LS1.2 HS.LS1.3 HS.LS1.7 DCI - LS1.A DCI - LS1.C
Engineering Design	HS.ETS1.2 HS.ETS1.3 DCI - ETS1.C
Heredity: Inheritance and Variation of Traits - Inheritance of Traits	DCI - LS3.A
Heredity: Inheritance and Variation of Traits - Variation of Traits	DCI - LS3.B
Analyze the effects of DNA sequencing on crossbreeding (5.3.3)	HS-LS3-3
Energy - Definitions of Energy	DCI - PS3.A
Energy - Conservation of Energy and Energy Transfer	DCI - PS3.B
Ecosystems: Interactions, Energy, and Dynamics - Cycles of Matter and Energy Transfer in Ecosystems	DCI - LS2.B
Please note that the NGSS Cross cutting Concepts and some Engineering Practice Standards were not included in this alignment though are an integral part of this coursework.	

High Standards For Peak Performance

Douglas County School District
CARSON VALLEY & LAKE TAHOE
Education, Graduation, Stronger Nation

Information
Phone: (775) 782-5134
Fax: (775) 782-3162
www.dcsd.k12.nv.us

Administration
Teri White
Superintendent
(775) 782-5135

Education Services
Christi Hines-Coates
Director, Area 1
(775) 265-5262

Brian Frazier
Director, Area 2
(775) 782-5160

Rommy Cronin
Director, Area 3
(775) 782-7170

Brandon Swain
Director, Area 4
(775) 782-7179

Business Services
Holly Luna
Chief Financial Officer
(775) 782-5131

Human Resources
Keith Lewis
Director
(775) 782-7177

Board of Trustees
Ross Chichester
President

Neal Freitas
Vice President

Cynthia Trigg
Clerk

Members
Karen Chessell
Teri Jamin
Robbe Lehmann
Thomas Moore

Douglas County School District

1638 Mono Avenue • Minden, Nevada 89423

To the Parent/Guardian of:

Your son/daughter is enrolled in Agricultural Science I or II, Principals of Biomedical Science or Human Body system. The Douglas County School District and the State of Nevada will provide ½ credit in science, specifically biology, upon completion of any of the above courses with a passing grade. However, post-secondary institutions have the discretion to determine acceptance of science and other academic credits earned in the high school setting. Under the Nevada Administrative Code 389.672, Douglas County School District is obligated to make students and their legal guardians aware of the post-secondary credit determinations.

If you have any questions, please contact me at (775) 782-7179.

Sincerely,

Brandon Swain
Director of Education Services, Area 4
Douglas County School District

Battle Mountain High School

425 Weaver Ave.
Battle Mountain, NV 89820
775-635-5436
775-635-5459 fax

LONGHORNS

April 25, 2016

RE: CTE Coursework/Academic Credit

State Board of Trustees,

Lander County School District is requesting academic credit for the following Nevada CTE courses in accordance with NAC 389.672 and NAC 389.673. Please consider the following courses:

Health Science 1
Agriculture Science 2
Veterinary Science

The Health Science 1 course has curriculum aligned to the current State CTE Skill Standards in accordance with NAC 389.672. Sandy Ayers is State Certified in Health Science. Lander County School District is requesting 0.5 academic health credit be awarded for the above mentioned course.

The Agriculture Science 2 course listed above have curriculum aligned to the current State CTE Skill Standards and in accordance with NAC 389.672. Heather Nield is State Certified in Biological Science and Agriculture Education. Lander County School District is requesting 1.0 academic science credit be awarded for the above mentioned course.

The Veterinary Science course listed above have curriculum aligned to the current State CTE Skill Standards in accordance with NAC 389.672. Heather Nield is State Certified in Biological Science and Agriculture Education. Lander County School District is requesting 1.0 academic science credit be awarded for the above mentioned course. It is understood that a student may only receive one unit of science for award and the district will ensure that NAC 389.672 will be followed.

Thank you for your consideration,

Anna Penola
LCSD Board of Trustee President

Jim Squibb
LCSD Superintendent

BOARD OF TRUSTEES
LANDER COUNTY SCHOOL DISTRICT
BOARD OF TRUSTEES MEETING
450 E. 6TH STREET
BATTLE MOUNTAIN, NV 89820
April 27, 2016
5:30 P.M.

A recorded CD is available for review of this meeting in its entirety.

A. CALL TO ORDER

President Anna Penola called the meeting to order at approximately 5:37 p.m. at the Lander County School District Office, 450 E. 6th Street, Battle Mountain, Nevada.
President Anna Penola led the assembled group in the Pledge of Allegiance.

Roll Call - Taken by President Anna Penola

Present:

Anna Penola	(President)
Mark Lake	(Clerk)
Todd Thompson	(Member) (5:45)
Susan Davis	(Member)
Jan Morrison	(Member)
Elizabeth Dias	(Member)
Jim Squibb	(Superintendent)
Lorrie Sparks	(Principal)
Toby Melver	(Principal)
Collin Belnap	(Principal)
Susan Ortega	(Director of Administrative Programs)
Steve Galloway	(Special Ed Director)

Absent:

John Davis	(Member)

B. PUBLIC COMMENT-*The following may not be verbatim. A copy of this meeting's recording is available.*

- **Johna Reeves** invited the Board to come to the first youth mental health first aid training on May 5th from 4p-8p and May 6th 8a-noon at the new John Peters Health Building by the hospital. Four people in the community are trained; the training will be done by Ms. Reeves and Abby. She said to let them know if anyone is interested and they will get signed up.
- **Michelle Caramella**- "At a board meeting in Austin last spring Paul Young asked that a policy be created so that Austin School could experience stability by keeping things the way they were for a period of time instead of having turmoil every spring that we are going to be losing a teacher." She referenced policy 005.3.6 Staffing of High School Program in Austin and the three year evaluation cycle. Mr. Caramella is now being transferred to Battle Mountain High School for next school year; it is only one year into the cycle. The community realizes they might not meet the requirement of an average of 5 high school students over a three year cycle but have not been given the allotted time per the policy. The current enrollment is 21 students which meets the 7:1 student to teacher ratio. Next year's expected enrollment is 23. She ended stating "We would ask that you would consider making this an agenda item in Austinso that the community can discuss this policy."

E. CONSENT ITEMS- ***For Possible Action***

1. **Approval and Payment of Bills and Warrants totaling $722,663.26 (Accounts Payable on April 13th $98,701.43 and April 21st $113,321.81 Payroll for April 25th $510,640.02)**
2. **Approval of Minutes of the meeting on April 13, 2016**
3. **Budget Adjustments**
4. **Quarterly Approval of the Class Size Reduction Report**
5. **Approval of the 4-Day School Week Application**
6. **Approval of two Employees' Resignations**
7. **Food Service Agreement with Austin Senior Center-** The Board will review and possibly take action on the FY17 Amendment and Ratification of the Food Service Agreement with the Austin Senior Center.
8. **Board Approval for CTE Coursework Application for Academic Credit in Science and Health-**The Board will discuss and possibly take action to approve these courses to be counted as Science credits.
9. **Notice of Non-Reemployment** - The Board will review and take administrative action concerning notice of non-reemployment of two licensed teachers for the 2016-2017 school year, per the district's Reduction In Force policy.

Superintendent Squibb explained some of the consent items.

- Non-Reemployment of employees- It is required that the Board take action to approve the district's Reduction In Force of two employees.
- The Four-day application is an Annual request from the state.
- The Quarterly Class-Size reduction report needs its quarterly approval.
- The budget adjustments have a zero net change.
- Mr. Squibb publicly thanked Mr. and Mrs. Belnap for their three years of service to the Lander County students.
- Mr. Belnap stated that the state has changed the requirements for offering credit for CTE classes in health or Ag Science and have to submit a plan to the state it will allow the students to fulfill their Science or Health credits.
- thanked those who participated in the interviews for the Service Director position and added that the

The agenda only says Science in the description for #8 the item will come back to get the health side approved.

Trustee Mark Lake made the motion to approve consent items 1-9 as presented. Trustee Todd Thompson seconded the motion. The motion carried unanimously by those present.

Vote:
Aye – President Anna Penola, Trustees Mark Lake, Susan Davis, Jan Morrison, Liz Dias, and Todd Thompson

Nay – 0

Abstain – 0

F. ACTION ITEMS ***For Possible Action***
Items were moved around from the posted agenda to accommodate guests.

1. **Request for Purchase of NV PERS Service from an Employee-** The Board will review requests from an employee and possibly take action to purchase years of service under the District's early separation policy.

Mr. Squibb explained a few options that we can do this. He offered to Mr. Nester that he could save his portion of the buyout if he stayed one more year and was guaranteed that the funds would be available for him. Mr. Nester declined and would still rather retire this year.

LANDER COUNTY SCHOOL DISTRICT

P.O. BOX 1300
625 Weaver Ave.
Battle Mountain, NV 89820
Telephone: (775) 635-2886
Fax: (775) 635-5347

Jim D. Squibb
Superintendent

April 22, 2016

RE: Academic Credit/CTE Application Committee Appointment

State Board of Trustees,
Lander County School District Committee Appointment for the academic credit application for CTE courses will be comprised of the following individuals:

Walt Holland, CTE Committee Chair
Shar Peterson, CTE Advisory Committee member
Heather Francom, CTE Advisory Committee member
Jill Chambliss, CTE Advisory Committee member
Dan Gralian, CTE Advisory Committee member
Hope Bauer, CTE Advisory Committee member
Sheila Miller, BMHS Biology Teacher
Dr. William Cox, BMHS Science Teacher
Heather Nield, BMHS Agriculture Instructor
Sandy Ayers, BMHS Health Teacher

Thank you for your consideration,

Jim Squibb
Superintendent
Lander County School District

Battle Mountain High School

425 Weaver Ave.
Battle Mountain, NV 89820
775-635-5436
775-635-5459 fax

LONGHORNS

Dear Parent/Guardian of

Your son/daughter is enrolled in the career and technical education program of study _____ that qualifies for academic credit. By successfully completing the CTE coursework, he/she may earn up to ____ credit in the academic area of _____.

Please note that while the academic credit earned through CTE coursework is designed to meet the requirements for high school graduation, the academic credit may not necessarily be accepted for academic credit by a specific postsecondary institution.

Sincerely,

Curriculum Alignment Document

Agriculture Science I and II/ Academic Science Credit

Proposed Academic Credit for (Check One): _____ English _____ Math __X__ Science ***Note:*** *When applying for Academic Science credit and not replacing a science course (e.g. Biology) standards alignment may include NVACSS from Physical Science, Life Sciences, Earth and Space Sciences, and/or Engineering Design*	
Name of Academic Course: Additional Science Credit	
Name of Academic Content Standards: Nevada Academic Content Science Standards	
Name of CTE Course (s): Agriculture Science I and II	
Include all standards or other specific learning objectives taught in the CTE course(s). Reference the CTE standard number	List the corresponding academic content academic standard code:
Example: Differentiate between a plant and animal cell (Ag. Sci. 6.2.2)	*Example: HS-LS1-2*
Explain that agriculture is a science (Ag. Sci. 1.1.2)	HS-LS4-4 HS-ESS3-1
Discuss the role of modern agriculture in basic human nutrition (1.1.5)	HS-ESS3-3 HS-ESS3-1
Organize the major technological developments that have occurred in agriculture (1.2.2)	HS-ESS3-4
Explain the role of government in the world's food supply (1.3.2)	HS-ESS3-1
List the steps of the scientific method (4.1.1)	HS-ETS1-2
Explain the steps in conducting research in agriculture, and conduct an appropriate research project (4.1.2)	HS-ETS1-2
Organize the major parts of a research report (4.1.3)	HS-ETS1-3
Determine the metric prefixes and units used for measuring length, volume weight, temperature, and area (4.3.2)	HS-LS2-1
Convert from one system of units to another system of units (4.3.3)	HS-LS2-1

Demonstrate proper us of common agriscience equipment (4.4.3)	HS-LS2-5 HS-LS3-2
Explain a cell's role and compare and contrast the types of cells (prokaryotic/eukaryotic)(5.2.1)	HS-LS1-1
Analyze the components of an animal cell and explain their functions (5.2.2)	HS-LS1-1
Define cell theory and examine the importance of mitosis (5.2.4)	HS-LS1-4
Identify and describe the stages of meiosis I and II (5.2.5)	HS-LS3-1 HS-LS3-2
Analyze the role of meiosis in spermatogenesis and oogenesis (5.2.6)	HS-LS3-2 HS-LS3-3
Compare and contrast mitosis and meiosis (5.2.7)	HS-LS3-2 HS-LS3-4
Analyze the effects of DNA sequencing on crossbreeding (5.3.3)	HS-LS3-3
Identify the major parts and describe the functions of the digestive system in livestock (5.4.1)	HS-LS1-1
Analyze the major nutrients and their importance to animals (5.4.2)	HS-LS1-6 HS-LS1-7 HS-LS2-4
Identify two categories of disease and determine the causes of each (5.5.2)	HS-LS3-2
Recognize the two categories of immunity and compare the types in each category (5.5.3)	HS-LS1-2
Identify good animal health management practices (5.5.4)	HS-LS3-3
State the classification and naming of plants (6.1.1)	HS-LS4-2
Distinguish two major groups of plants (6.1.2)	HS-LS4-2 HS-LS1-2
Compare the classification of plants by life cycle (6.1.3)	HS-LS1-5
Label the parts of a plant cell (6.2.1)	HS-LS4-1
Differentiate between a plant and animal cell (6.2.2)	HS-LS1-2
State the function of plant cell organelles (6.2.3)	HS-LS1-2

Analyze the process of photosynthesis (6.3.1)	HS-LS1-5
Formulate the process of cellular respiration (6.3.2)	HS-LS1-7 HS-LS2-3
Describe plant growth processes (6.3.3)	HS-LS1-7
Summarize why photosynthesis and respiration are important to human beings (6.3.4)	HS-LS2-5
Identify and describe the parts of a flower (6.4.1)	HS-LS4-1
Explain the purpose of a flower (6.4.2)	HS-LS4-2
List different types of flowers (6.4.3)	HS-LS4-2
Describe the difference between monocot and dicot flowers (6.4.4)	HS-LS1-4
Explain the importance of plant propagation (6.5.1)	HS-LS1-4 HS-LS3-3
Compare the difference between sexual and asexual propagation (6.5.2)	HS-LS2-8 HS-LS3-1 HS-LS3-3
Demonstrate asexual propagation (6.5.3)	HSIKS2-8 HS-LS3-1 HS-LS3-3
Differentiate between macronutrients and micronutrients (6.6.1)	HS-LS1-2
Describe pH and how it is modified (6.6.2)	HS-LS4-4
Describe the components of a fertilizer (6.6.3)	HS-LS2-5
Categorize the methods of safely applying agricultural chemicals to crops (6.6.4)	HS-LS2-5
Explain the role of agriculture chemicals in crop production (6.6.5)	HS-LS2-5
List the components of soil (7.1.1)	HS-ESS2-1 HS-ESS2-2 HS-ESS2-3
Describe the concept of soil texture and its importance (7.1.2)	HS-ESS2-2

Classify the texture of a soil sample (7.1.3)	HS-ESS2-2
Identify various soil structures, their formation, and importance in agriculture production (7.1.4)	HS-ESS2-5
Define soil erosion and describe the two classes of erosion (7.2.1)	HS-ESS2-5
Identify the causes of soil erosion and the steps in the erosion process (7.2.2)	HS-ESS2-2 HSESS2-5
Identify basic career information related to soil science (7.3.1)	HS-ESS2-3
Classify greenhouse designs (8.2.1)	HS-ETS1-3
Review consideration for greenhouse frameworks (8.2.2)	HS-ETS1-3
Identify and describe glazing materials (8.2.3)	HS-ETS1-2
Describe the functions of the headhouse (8.2.4)	HS-ETS1-2
List greenhouse bench options (8.2.5)	HS-ETS1-2
Define and identify types of natural resources (10.1.1)	HS-LS2-5
Distinguish between renewable and nonrenewable resources (10.1.2)	HS-LS2-4 HS-LS2-5
Compare the difference between inexhaustible and exhaustible resources (10.1.3)	HS-LS2-4
Recognize how humans use natural resources (10.2.1)	HS-ESS3-3
Identify the urban and rural impacts of natural resource use (10.2.2)	HS-ESS1-1 HS-ESS3-2 HS-ESS3-3 HS-ESS3-4
Analyze the impact of recycling and reusing resources (10.2.3)	HS-ESS3-2 HS-ESS3-4
Critique the importance of conservation and preservation (10.3.1)	HS-ESS3-4
Identify the effects of humans on the environment, including the greenhouse effect (10.3.2)	HS-ESS-3-4 HS-LS4-6

Identify types of natural resource damage (10.3.3)	HS-ESS3-1
Define ecology and ecosystems (10.4.1)	HS-LS2-1
Explain natural selection and succession (10.4.2)	HS-LS2-8 HS-LS3-2 HS-LS4-4
Identify biomes and explain ecosystem diversity (10.4.3)	HS-LS2-6
Diagram and explain the nitrogen, phosphorus, carbon, and water cycle (10.4.4)	HS-ESS2-5 HS-ESS2-6 HS-LS2-4 HS-LS2-5
Identify Nevada's bioregions (10.5.1)	HS-LS2-6
Explain effects of invasive species (10.5.2)	HS-LS2-6
Explain six rangeland management concepts (10.5.3)	HS-LS2-7

Lyon County School District
25 E. Goldfield Ave.
Yerington, NV 89447

Ph. (775) 463-6800
Fax (775) 463-6808

www.lyoncsd.org

June 29, 2016

Lyon County School District would like to continue to grant academic credit for an additional science course for the following CTE courses:

- Agriculture Science I and II *or* Horticulture Science – Yerington High School and Fernley High School
- Health Science I and II – Yerington High School, Dayton High School, and Fernley High School

A review committee of science teachers and CTE Health Science and Agriculture Science teachers was formed in May 2016. Those serving on the committee were Tamra Herschbach and Crystal Mattice from Yerington High School, Rick Walker from Dayton High School, and Keri Pommerening from Lyon County School District Director of Secondary Curriculum, Instruction and Assessment. The letter that invited the committee is attached.

The review committee felt the listed CTE courses for agriculture science and health science met the criteria needed for students to earn an additional academic science credit after completion of both agriculture science I and II *or* horticulture science, or both health science I and II. The curriculum alignments for both programs are attached.

The Lyon County School District Board of Trustees approved the request for academic credit for these CTE programs at the June 28, 2016 meeting. A summary of the approval is attached. Minutes will not be released until after approval at the July 26, 2016 meeting.

A copy of the student notification letter is also attached.

Curriculum Alignment Document

Health Science I and II/ Academic Science Credit

Proposed Academic Credit for (Check One): _____ English _____ Math ___X___ Science ***Note:*** *When applying for Academic Science credit and not replacing a science course (e.g. Biology) standards alignment may include NVACSS from Physical Science, Life Sciences, Earth and Space Sciences, and/or Engineering Design*	
Name of Academic Course:	
Name of Academic Content Standards: Nevada Academic Content Science Standards	
Name of CTE Course (s): Health Science I and II	
Include all standards or other specific learning objectives taught in the CTE course(s). Reference the CTE standard number	List the corresponding academic content academic standard code:
Example: Differentiate between a plant and animal cell (Ag. Sci. 6.2.2)	*Example: HS-LS1-2*
Recognize body planes, directional terms, quadrants, and cavities (Health Sci. 1.1.2)	HS-L.12.A.3 HS- L.12.A.4
Explain the anatomical structure and physiological functions of the human body (Health Sci. 1.1.3)	HS-L.12.B.1 HS- L.12.B.2 HS-LS1 -2 HS-LS1-7
Analyze the basic structures and specialized function of the human body as they relate to age, wellness, disease, disorders, therapies, and care and rehabilitation (Health Sci. 1.1.4)	HS-L.12.B.3 HS-L.12.C.1 HS-L.12.C.2 HS-L.12.C.3 HS-LS1-2
Explain and describe common diseases and disorders of each body system (prevention, pathology, diagnosis, and treatment) (Health Sci. 1.2.1)	HS-L.12.B.3 HS-L.12.C.1 HS-L.12.C.2 HS-L.12.C.3
Explain the effects of chemicals, medications, and other agents on the human body or organ systems (Health Sci. 1.2.2)	HS-LS1-3
Discuss the impact of genetics, gender, age, and environment on diseases, disorders, and individual health (Health Sci. 1.2.3)	HS-L.12.A.1 HS-L.12.A.5

	HS-L.12.D.2 HS-L.12.D.6 HS-LS3-1 HS-LS3-2
Relate the knowledge of an abnormal anatomical structure or physiological response to disease (Health Sci. 1.2.4)	HS-L.12.D.5 HS-L.12.D.6 HS-LS3-3
Analyze charts, diagrams, graphs, and tables (Health Sci. 1.3.5)	HS-LS3-3
Analyze historical, political, cultural, and geographical influences on healthcare (Health Sci. 2.1.2)	HS-ESS3-3
(Explain the impact of emerging issues such as technology, epidemiology, bioethics, and socioeconomics on healthcare systems (Health Sci. 2.1.6)	HS-LS2-7
Adapt practices of green technology applicable to the healthcare setting that has environmental impact (i.e., recycling, energy efficiency, environmentally preferable chemical use, waste disposal, and water conservation) (Health Sci. 2.1.7)	HS-ESS3-4
Explain acceptable use of technology in the workplace (Health Sci. 3.1.7)	HS-PS4-2
Explain practices that could result in malpractice, liability, and/or negligence (Health Sci. 3.1.8)	HS-ETS1-3
Apply standards for Health Insurance Portability and Accountability Act (HIPAA) (Health Sci. 3.1.12)	HS-PS4-2
(Recognize common threats to confidentiality (Health Sci. 3.1.13)	HS-PS4-2
Discuss the importance of respectful and empathetic interactions with diverse age, cultural, economic, ethnic, and religious groups (Health Sci. 3.3.3)	HS-ETS1-1 HS-ETS1-3
Describe the influence of religious and cultural values on healthcare practices (Health Sci. 3.3.4)	HS-ETS1-1 HS-ETS1-3
Critique professional standards related to ethical practice in healthcare (Health Sci. 3.3.5)	N.12.B.3
Describe practices, behaviors, and lifestyle choices that promote health and wellness (Health Sci. 6.1.1)	HS-LS1-3
Illustrate safety practices that minimize negative consequences related to health behaviors (Health Sci. 6.1.2)	HS-LS1-3
Analyze risk factors and consequences of unhealthy behaviors (Health Sci. 6.1.3)	HS-LS3-3 HS-LS3-4
Describe strategies for prevention of diseases, including health screenings and examinations (Health Sci. 6.1.4)	HS-LS4-2
Develop a wellness plan that can be used in personal and professional life (Health Sci. 6.1.5)	HS-LS1-2
Compare and contrast traditional, complementary, and alternative	HS-LS4-3

healthcare (Health Sci. 6.1.6)	
Evaluate how research and medical advances influence the prevention and control of illnesses and diseases (Health Sci. 6.1.7)	HS-LS1-3 HS-LS4-3
Explain characteristics of effective teams (Health Sci. 7.1.1)	HS-ETS1-3
Recognize methods for building positive team relationships (Health Sci. 7.2.1)	HS-ETS1-3
Recognize conditions that may lead to conflict (Health Sci. 7.2.3)	HS-ETS1-3 HS-PS4-2
Apply effective techniques for managing team conflict (Health Sci. 7.2.4)	HS-ETS1-3
Demonstrate conflict resolution and reinforce positive outcomes (Health Sci. 7.2.5)	HS-ETS1-2
Explain safety signs, symbols, and labels (Health Sci. 8.1.3)	HS-PS1-2
Identify microorganisms that may cause disease (Health Sci. 8.2.1)	HS-LS1-1
Identify the components of the cycle of infection (Health Sci. 8.2.2)	HS-LS1-2
Identify methods to control microorganisms in a physical environment (Health Sci. 8.2.3)	HS-LS1-3
Identify opportunities to stop the cycle of infection throughout the various stages (Health Sci. 8.2.4)	HS-LS1-3
Evaluate various environments for safety concerns, including dangerous materials and toxic chemicals (Health Sci. 8.3.3)	HS-PS1-2
Practice safety techniques to prevent accidents (Health Sci. 8.3.5)	HS-PS1-2
Practice fire safety in a healthcare setting (Health Sci. 8.4.4)	HS-PS1-2
Prioritize appropriate response for various emergency scenarios (Health Sci. 8.4.8)	HS-PS3-3
Differentiate among the National Incident Management System (NIMS) and various state and local systems (Health Sci. 8.4.12)	HS-PS1-8
Practice a light search and rescue drill (Health Sci. 8.4.13)	HS-PS3-3
Identify potential targets of terrorism in the community (Health Sci. 8.4.14)	HS-PS1-8
Obtain Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) certification through the American Heart Association or the American Red Cross (Health Sci. 9.1.3)	HS-PS3-3
Explain assessment tools and their uses in scientific investigations (Health Sci. 9.2.2)	HS-PS3-3
Analyze patient trends when reviewing medical information (Health Sci. 9.2.6)	HS-LS3-3
Predict patient outcomes using patient data (Health Sci. 9.2.7)	HS-LS1-3 HS-ETS1-3

Curriculum Alignment Document

Agriculture Science I and II/ Academic Science Credit

Proposed Academic Credit for (Check One): _____ English _____ Math ___X___ Science ***Note:*** *When applying for Academic Science credit and not replacing a science course (e.g. Biology) standards alignment may include NVACSS from Physical Science, Life Sciences, Earth and Space Sciences, and/or Engineering Design*	
Name of Academic Course:	
Name of Academic Content Standards: Nevada Academic Content Science Standards	
Name of CTE Course (s): Agriculture Science I and II	
Include all standards or other specific learning objectives taught in the CTE course(s). Reference the CTE standard number	**List the corresponding academic content academic standard code:**
Example: Differentiate between a plant and animal cell (Ag. Sci. 6.2.2)	*Example: HS-LS1-2*
Explain that agriculture is a science (Ag. Sci. 1.1.2)	HS-LS4-4 HS-ESS3-1
Discuss the role of modern agriculture in basic human nutrition (1.1.5)	HS-ESS3-3 HS-ESS3-1
Organize the major technological developments that have occurred in agriculture (1.2.2)	HS-ESS3-4
Explain the role of government in the world's food supply (1.3.2)	HS-ESS3-1
List the steps of the scientific method (4.1.1)	HS-ETS1-2
Explain the steps in conducting research in agriculture, and conduct an appropriate research project (4.1.2)	HS-ETS1-2
Organize the major parts of a research report (4.1.3)	HS-ETS1-3
Determine the metric prefixes and units used for measuring length, volume weight, temperature, and area (4.3.2)	HS-LS2-1
Convert from one system of units to another system of units (4.3.3)	HS-LS2-1

Demonstrate proper us of common agriscience equipment (4.4.3)	HS-LS2-5 HS-LS3-2
Explain a cell's role and compare and contrast the types of cells (prokaryotic/eukaryotic)(5.2.1)	HS-LS1-1
Analyze the components of an animal cell and explain their functions (5.2.2)	HS-LS1-1
Define cell theory and examine the importance of mitosis (5.2.4)	HS-LS1-4
Identify and describe the stages of meiosis I and II (5.2.5)	HS-LS3-1 HS-LS3-2
Analyze the role of meiosis in spermatogenesis and oogenesis (5.2.6)	HS-LS3-2 HS-LS3-3
Compare and contrast mitosis and meiosis (5.2.7)	HS-LS3-2 HS-LS3-4
Analyze the effects of DNA sequencing on crossbreeding (5.3.3)	HS-LS3-3
Identify the major parts and describe the functions of the digestive system in livestock (5.4.1)	HS-LS1-1
Analyze the major nutrients and their importance to animals (5.4.2)	HS-LS1-6 HS-LS1-7 HS-LS2-4
Identify two categories of disease and determine the causes of each (5.5.2)	HS-LS3-2
Recognize the two categories of immunity and compare the types in each category (5.5.3)	HS-LS1-2
Identify good animal health management practices (5.5.4)	HS-LS3-3
State the classification and naming of plants (6.1.1)	HS-LS4-2
Distinguish two major groups of plants (6.1.2)	HS-LS4-2 HS-LS1-2
Compare the classification of plants by life cycle (6.1.3)	HS-LS1-5
Label the parts of a plant cell (6.2.1)	HS-LS4-1
Differentiate between a plant and animal cell (6.2.2)	HS-LS1-2
State the function of plant cell organelles (6.2.3)	HS-LS1-2

Analyze the process of photosynthesis (6.3.1)	HS-LS1-5
Formulate the process of cellular respiration (6.3.2)	HS-LS1-7 HS-LS2-3
Describe plant growth processes (6.3.3)	HS-LS1-7
Summarize why photosynthesis and respiration are important to human beings (6.3.4)	HS-LS2-5
Identify and describe the parts of a flower (6.4.1)	HS-LS4-1
Explain the purpose of a flower (6.4.2)	HS-LS4-2
List different types of flowers (6.4.3)	HS-LS4-2
Describe the difference between monocot and dicot flowers (6.4.4)	HS-LS1-4
Explain the importance of plant propagation (6.5.1)	HS-LS1-4 HS-LS3-3
Compare the difference between sexual and asexual propagation (6.5.2)	HS-LS2-8 HS-LS3-1 HS-LS3-3
Demonstrate asexual propagation (6.5.3)	HSlKS2-8 HS-LS3-1 HS-LS3-3
Differentiate between macronutrients and micronutrients (6.6.1)	HS-LS1-2
Describe pH and how it is modified (6.6.2)	HS-LS4-4
Describe the components of a fertilizer (6.6.3)	HS-LS2-5
Categorize the methods of safely applying agricultural chemicals to crops (6.6.4)	HS-LS2-5
Explain the role of agriculture chemicals in crop production (6.6.5)	HS-LS2-5
List the components of soil (7.1.1)	HS-ESS2-1 HS-ESS2-2 HS-ESS2-3
Describe the concept of soil texture and its importance (7.1.2)	HS-ESS2-2

Classify the texture of a soil sample (7.1.3)	HS-ESS2-2
Identify various soil structures, their formation, and importance in agriculture production (7.1.4)	HS-ESS2-5
Define soil erosion and describe the two classes of erosion (7.2.1)	HS-ESS2-5
Identify the causes of soil erosion and the steps in the erosion process (7.2.2)	HS-ESS2-2 HSESS2-5
Identify basic career information related to soil science (7.3.1)	HS-ESS2-3
Classify greenhouse designs (8.2.1)	HS-ETS1-3
Review consideration for greenhouse frameworks (8.2.2)	HS-ETS1-3
Identify and describe glazing materials (8.2.3)	HS-ETS1-2
Describe the functions of the headhouse (8.2.4)	HS-ETS1-2
List greenhouse bench options (8.2.5)	HS-ETS1-2
Define and identify types of natural resources (10.1.1)	HS-LS2-5
Distinguish between renewable and nonrenewable resources (10.1.2)	HS-LS2-4 HS-LS2-5
Compare the difference between inexhaustible and exhaustible resources (10.1.3)	HS-LS2-4
Recognize how humans use natural resources (10.2.1)	HS-ESS3-3
Identify the urban and rural impacts of natural resource use (10.2.2)	HS-ESS1-1 HS-ESS3-2 HS-ESS3-3 HS-ESS3-4
Analyze the impact of recycling and reusing resources (10.2.3)	HS-ESS3-2 HS-ESS3-4
Critique the importance of conservation and preservation (10.3.1)	HS-ESS3-4
Identify the effects of humans on the environment, including the greenhouse effect (10.3.2)	HS-ESS-3-4 HS-LS4-6

Identify types of natural resource damage (10.3.3)	HS-ESS3-1
Define ecology and ecosystems (10.4.1)	HS-LS2-1
Explain natural selection and succession (10.4.2)	HS-LS2-8 HS-LS3-2 HS-LS4-4
Identify biomes and explain ecosystem diversity (10.4.3)	HS-LS2-6
Diagram and explain the nitrogen, phosphorus, carbon, and water cycle (10.4.4)	HS-ESS2-5 HS-ESS2-6 HS-LS2-4 HS-LS2-5
Identify Nevada's bioregions (10.5.1)	HS-LS2-6
Explain effects of invasive species (10.5.2)	HS-LS2-6
Explain six rangeland management concepts (10.5.3)	HS-LS2-7

Wayne Workman
Superintendent

Alan Reeder
Deputy Superintendent

Board of Trustees

President
Jason Sanderson
Clerk
Bridget Peterson
Members
Neal E. McIntyre
Donald Parsons
John Stevens
Charles Shirley
Maureen Williss

Lyon County School District
25 E. Goldfield Ave.
Yerington, NV 89447

Ph. (775) 463-6800
Fax (775) 463-6808

www.lyoncsd.org

May 15, 2016

Crystal Mattice, Tamra Herschbach, and Rick Walker,

I am asking if you will join me in serving on a review committee to compare the Nevada Academic Content Science Standards with the Agriculture Science I and II standards, and the Health Science I and II standards to determine if students can earn a science credit through completion of either of these course sequences.

Sincerely,

Keri Pommerening
Director of Secondary Curriculum, Instruction, and Assessment

Wayne Workman
Superintendent

Alan Reeder
Deputy Superintendent

May 15, 2016

Crystal Mattice, Tamra Herschbach, and Rick Walker,

I am asking if you will join me in serving on a review committee to compare the Nevada Academic Content Science Standards with the Agriculture Science I and II standards, and the Health Science I and II standards to determine if students can earn a science credit through completion of either of these course sequences.

Sincerely,

Keri Pommerening
Director of Secondary Curriculum, Instruction, and Assessment

Lyon County School District
25 E. Goldfield Ave.
Yerington, NV 89447

Ph. (775) 463-6800
Fax (775) 463-6808

www.lyoncsd.org

Lyon County School District
25 E. Goldfield Ave.
Yerington, NV 89447

Ph. (775) 463-6800
Fax (775) 463-6808

www.lyoncsd.org

Dear Parent/Guardian of:

Your son/daughter is enrolled in the career and technical education program of study [_____] that qualifies for academic credit. By successfully completing the CTE coursework, he/she may earn up to one credit in the academic area of science.

Please note that while the academic credit earned through CTE coursework is designed to meet the requirements for high school graduation, the academic credit may not necessarily be accepted for academic credit by a specific postsecondary institution.

Sincerely,

Keri Pommerening
Director of Secondary Curriculum, Instruction, and Assessment

LYON COUNTY BOARD OF SCHOOL TRUSTEES
TUESDAY, JUNE 28, 2016 6:30 P.M.
SILVER STAGE ELEMENTARY SCHOOL
SILVER SPRINGS, NEVADA

MINUTES

A Regular of the Board of Trustees of Lyon County School District was held Tuesday, June 28, 2016, beginning at 6:32 PM in the Professional Learning Center, Silver Stage Elementary School, Silver Springs, NV.

President Jason Sanderson called the meeting to order at 6:30pm and the Pledge of Allegiance followed.

BOARD MEMBERS PRESENT
President Jason Sanderson, Clerk Bridget Peterson, Members John Stevens, Neal E. McIntyre, Donald Parsons, and Charles Shirley.

BOARD MEMBERS ABSENT
Maureen Williss

ADMINISTRATORS PRESENT
Superintendent Wayne Workman. Deputy Superintendent Alan Reeder. Directors Shawn Heusser, Keri Pommerening, Jim Gianotti, Alan Medeiros.

GUESTS PRESENT

Bonita Stevens, Donna Anderson, Nadine Boschert, Gerry Boschert, VaDonna Rivera, Jackie Cox, Sherry Parsons, Kimber L.A. Crabtree, Cindy Darden, Kristen Anders-Garcia, Valerie Clark, Brett Kanwetz, Shani Dues, Lise Coudriet, Keith Trout, Jessica Garcia from MVN, Robert Perea from the Fernley Reporter.

4. APPROVAL OF AGENDA:
A motion was made by Member John Stevens and seconded by Member Neal E. McIntyre to approve the agenda as presented.

Upon calling for a vote, the motion passed 6-0.

5. APPROVAL OF MINUTES:
A motion was made by Member Neal E. McIntyre and seconded by Clerk Bridget Peterson to approve the minutes from the May 18, 2016 board meeting as presented.

Upon calling for a vote, the motion passed 6-0.

6. BOARD MEMBER REPORTS: Opportunity for Board members to report items of interest.
   Member Shirley attended the Eagle Ridge graduation. He offered congrats to all graduates.

   Member Parsons attended the State Livestock Judging Contest and Lyon County did a fantastic job.

   Member Stevens attended the Adult Education graduation with Members Shirley and Parsons. He said the stories behind each of the graduates were awesome. Member Stevens was busy this past weekend with Oodles of Noodles. He noted 2 non-profit organizations also attended, Color of Arts and Stand Tall, and both programs are huge supporters of LCSD students.

   Member McIntyre had nothing to report.

   Clerk Peterson had nothing to report.

   President Sanderson attended a State Board of Regents meeting at TMCC with Superintendent Workman, Principal Kent Jones, and a student to discuss the WNC Jump Start program. He said the student did a phenomenal job sharing their story.

7. ATTITUDE OF GRATITUDE
   Board members each took turns reading Attitudes of Gratitude's written by a few of the LCSD students.

8. SUPERINTENDENT REPORT: Opportunity for Superintendent to report items of interest. Items to be presented but not limited to:

   Superintendent Workman said thanks to all the staff for successful graduations and promotions. He knows it's a lot of work preparing for the ceremonies, and it's rewarding to see the students cross the stage.

   He thanked Alan Reeder, Shani Dues, all law enforcement and first responders for their help in the 2-day training that took place in the beginning of June. There was a lot of planning and coordination, and he appreciated all the efforts put in to this training.

   WNC President, John Kinkilla, invited Superintendent Workman and President Sanderson to present to the Board of Regents on the WNC Jump Start program and the successes in Lyon County. He said the highest success rates of the Jump Start program were in LCSD than any other part of Northern Nevada.

9. PUBLIC PARTICIPATION:
   Donna Anderson, 6th grade teacher at RES, requested to discuss RES students

completely. Jim Gleason said he is guessing at least 20 years and Member McIntyre agreed, especially if it is maintained properly.

Superintendent Workman said there are a couple of options for the Board to take and reminded them this was originally approved 4 years ago.

A motion was made by Member Neal E. McIntyre and seconded by Member Charles Shirley to go forward with original $365K plan which was approved 4 years ago.

Upon calling for a vote, the motion passed 6-0.

21. **(FOR POSSIBLE ACTION)** Discussion and Possible Action to approve an Interlocal Agreement between Western Nevada Regional Youth Center and Lyon County School District. This item is being presented by Deputy Superintendent, Alan Reeder.

    A motion was made by Member Donald Parsons and seconded by Member Neal E. McIntyre to approve an Interlocal Agreement between Western Nevada Regional Youth Center and Lyon County School District.

    Upon calling for a vote, the motion passed 6-0.

22. **(FOR POSSIBLE ACTION)** Discussion and Possible Action to approve academic credit for specific Career and Technical Education courses as required by the Nevada Department of Education. This item is being presented by Secondary Curriculum, Instruction and Assessment Director, Keri Pommerening.

    A motion was made by Member Donald Parsons and seconded by Clerk Bridget Peterson to approve academic credit for specific Career and Technical Education courses as required by the Nevada Department of Education.

    Upon calling for a vote, the motion passed 6-0.

23. **(FOR POSSIBLE ACTION)** Discussion and Possible Action to approve revisions to LCSD Policy IKF: Graduation Requirements as a first reading. This item is being presented by Secondary Curriculum, Instruction and Assessment Director, Keri Pommerening and Deputy Superintendent, Alan Reeder.

    A motion was made by Member Donald Parsons and seconded by Member Charles Shirley to approve revisions to LCSD Policy IKF: Graduation Requirements as a first reading.

    Gerry Boschert, teacher at YHS for past 16 years, told the Board he had a 2.5 hour discussion with Mr. Workman last week and it was professional and helpful. He said he was very impressed and grateful for the time that Mr. Workman took to have this

Stevens to approve a report on the new District and school websites as recommended in the communication plan.

Upon calling for a vote, the motion passed 6-0.

19. **(FOR POSSIBLE ACTION)** Discussion and Possible Action to approve a Public Information Officer position. This item is being presented by Deputy Superintendent, Alan Reeder and Superintendent, Wayne Workman.

    A motion was made by Member Donald Parsons and seconded by Member Charles Shirley to approve a Public Information Officer position.

    Member Shirley asked if this is going to take away from the Webmasters at each site. Superintendent Workman said not at this time. After the workload is assessed, that would be a possibility.

    Upon calling for a vote, the motion passed 6-0.

20. **(FOR POSSIBLE ACTION)** Discussion and Possible Action regarding work on the Fernley Elementary School parking lot in conjunction with the Hardie Lane Project with the City of Fernley. This item is being presented by Director of Finance and Facilities, Shawn Heusser and Operations and Maintenance Supervisor, Jim Gleason.

    Director Heusser said the Capital Improvement Plan has money set aside for this project, but with the new developments in the Master Facility Plan, the concern is where to put the money right now. The big question is whether to put the money into the parking lot knowing that the school may or may not be there in 5 years.

    Member McIntyre said that is a great point; why would they want to spend $400K on this right now if this whole area is going to be changed down the road. Jim Gleason said he asked the engineers what is the minimum that can be done with the parking lot. He was told a chip seal, without lighting or anything would cost $91K and would last approximately 5 years. In addition, the City of Fernley will have to do reasonable reimbursement for the easement. Superintendent Workman said whatever agreement is drafted with the City will be required to bring to the Board for approval.

    Member Parsons believes the District will still own and use this building in the years coming and thinks it should be fixed right. Member Stevens said the Master Facility Plan is just a plan and nothing has been committed to yet. He said he agreed with Member Parsons and he doesn't want to put a band aid on this project. Member Shirley was also in agreement with Member Parsons. Member McIntyre hearing the different opinions is what these discussions are all about, and he agreed with the other three board members.

    Member Stevens asked what the life span would be if they did this project

- a copy of the minutes with a motion to approve from the April 12, 2016 Douglas County Board of Trustees meeting
- a copy of the student notification letter.

The application submitted by Lander County School District includes the following:

- Nevada Academic Content Standards - Science alignment documents for Agriculture Science I and II
- a statement of the academic credit to be granted
- letter of appointment of the committee members
- a copy of the minutes with a motion to approve from the Lander Board of Trustees meeting April 27, 2016
- a copy of the student notification letter
- Please note changes to action, letter dated April 25, 2016, Battle Mountain High School/Lander County School District – the request being made to the State Board of Education at this time is for academic approval for Agriculture Science I and II, with one science credit to count toward meeting graduation requirements upon completion of Agriculture Science II. The request made for academic credit to be awarded for Health Science and Veterinary Science has been withdrawn.

The application submitted by Lyon County School District includes the following:

- Nevada Academic Content Standards – Science alignment documents for Agriculture Science I and II and Health Science I and II
- a statement of the academic credit to be granted
- a letter stating the appointment of committee members
- a copy of the minutes with a motion to approve from the June 28, 2016 Lyon County Board of Trustees meeting
- a copy of the student notification letter.

SUBMITTED BY: Mike Raponi, Office of Career Readiness, Adult Learning & Education Options