SAN LEANDRO UNIFIED SCHOOL DISTRICT
COURSE PROPOSAL

SECTION A. COVER PAGE

1. **Course Title: Bio Health Pathways I**	7. **Action** New Course Started Fall 2015 X Course Revision ☐ Title Change Only
2. Date Submitted: 9-15-15	8. **Grade Level** X9 X10 X11 X12
3. Transcript Title/Abbreviation(s) BioHealth Pathways I (BHP I)	**9. Prerequisites** (Please list.) X None ☐ Required ☐ Recommended
4. Transcript Course Code/Course Number : 3150	**10. Seeking Program Distinction?** ☐ YES (Check one below.) ☐NO ☐Honors ☐ AP X Other
5. Subject Area **Non-Departmental**	11. **Is this a CTE course?** ☐ YES X NO Career Pathway Course **If YES, complete Section C**
6. **Department** Science	12. **Previously approved by UC?** X YES Year approved Sept. 15th, 2015 Year removed
13. UC ELIGIBILITY **Already eligible? X YES Approved Sept. 15th, 2015** **a ☐ b☐ c☐ d☐ e☐ f☐ gX** **Proposing eligibility?** **a ☐ b☐ c☐ d☐ e☐ f☐ g**X Please mark one for approved eligibility or proposed eligibility.	14. **Unit Value/Course Credit/Length of Course** X 0.5 (semester or half-year) ☐ 1.0 (one year equivalent) ☐ 2.0 (two-year equivalent) ☐ Other
15. School Contact: Name: Heather Oshiro/Rachel England Phone: Email: hoshiro@slusd.us/rengland@slusd.us Position: counselor/teacher	
16.	**DISTRICT OFFICE USE ONLY** **Date approved by Board Curriculum Committee** **11-3-15** **Date approved by Board**

16. Signatures: Department Chair Principal:	

SECTION B. COURSE CONTENT

17. Course Description

This semester-long elective is recommended for 9th, 10th, 11th and 12th grade students who are interested in possibly pursuing a career in the health/medical field. Through a process of project based learning, work based learning, and self-exploration, students will learn a new way of thinking about science, the health industry, themselves and their academic and career options. The course is designed to actively engage students in hands-on, minds-on learning integrating science, health, technology and 21st century skills (communication, creativity, critical thinking and collaboration). The health/medical fields covered will include mental health, sports medicine and physical therapy, allied health I, dentistry, biotechnology, medicine I, public health.

18. Course Goals and/or Major Student Outcomes

-Students will become familiar with the range of career opportunities in the health/medical field.
-Students will develop self-assessment and metacognitive strategies to aide them in self-advocacy and lifelong learning.
-Students will practice written, visual, and oral communication skills.
-Students will learn the science, medical terminology, practices, demands, and social issues involved in health careers through analysis, possible diagnosis, and treatment of case studies, current events, and historical events.
-Students will understand the academic and career decision making process.
-Students will become aware of the tools and resources available to them to best prepare them for high school as well as the transitions to postsecondary education and career.
-Students will build a resume and design a personal plan to achieve their academic and career goals.

19. Course Objectives (standards)

Common Core State Standards Connections:

ELA/Literacy -

RST.11-12.1	**Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. (HS-LS1-1)**
RST.11-12.9	**Synthesize information from a range of sources into a coherent understanding of a process, phenomenon, or concept resolving conflicting information when possible.**
WHST.9-12.2	**Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. (HS-LS1-1)**
WHST.9-12.7	**Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. (HS-LS1-3)**
WHST.11-12.8	**Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. *(HS-LS1-3)***
WHST.9-12.9	**Draw evidence from informational texts to support analysis, reflection, and research. (HS-LS1-1)**
SL.11-12.5	**Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. *(HS-LS1-2)***

20. Course Outline (20 weeks)

The BioHealth Pathway course provides students with real world, relevant information, activities, and experiences that will guide them through a process of discovery of science, themselves, the career options in the health field, and how to achieve their goals.

Weekly Assignments:

Media Monday: Weekly current events will be reported every Monday. They are to use their research skills taught by the librarian to find a credible current events of their choosing that are relevant to the BioHelath industry. They will report the title, date published, source and author, a six sentence summary of the current event and two new vocabulary words learned in the text. Every Monday, four students are randomly selected to share out their BioHealth news with the class. Vocabulary shared will also be on the weekly quiz.

Building BioHealth Vocabulary: 400 Scientific Root Words, Prefixes and Suffixes. To enrich students understanding of medical terminology used when reading their current events, scientific articles, and medical case studies, there will be weekly quiz on twenty scientific root words, prefixes and suffixes. Vocabulary reported from classmates during the current event will also be on the quiz.
(http://www.biologyjunction.com/prefixes%20and%20suffixes.pdf)

Ongoing Service-Learning Assignments (3 weeks, divided throughout the course)
A hands-on, community based approach will be used to demonstrate topics in public health. Students will be required to work in partnership with the school's Barbara Lee Center for Health and Wellness (BLC).

1. Health and Wellness Navigator
    a. The Program Manager/Health Educator from the BLC will train students how to professionally communicate and advertise the free services provided for the students and community. Sensitivities around confidentiality will be emphasised.
    b. All student will receive a business cards. They are to pass the cards out when they have identified a need of their peers that could be met by the services and resources at the BLC.
    c. Students will work to meet the class goal of 2000 connections in one semester by communicating with 5 peers a week, or one peer a day.
2. Health and Wellness Peer Educators
    a. Part of a team Peer Educators who will identify, develop, facilitate topical health and wellness focused presentations and projects for their peers and community.
    b. Peer educators will identify topics relevant to them and their peers in which to develop presentations and projects. Topics can include body image, nutrition, Rx and other drug use, sexuality and cyber-bullying. Presentation and projects will be developed utilizing a critical praxis, including the following steps:
        i. Identifying the problem
        ii. Research the problem
        iii. Develop a collective plan of action to address the problem

iv. Implement the plan of action (presentation)
v. Evaluate the action, access it's efficacy, and reexamine the start of the problem.

c. Presentations and projects can consist of a wide variety of forums, including skits, rallies, health fairs, in-class presentations, peer-to-peer contacts, interviews, surveys, web forums, mobile apps, videos, etc. Peer educators will facilitate presentations and projects both in and out of school.

d. All presentations and projects will be youth led, youth generated, youth facilitated and youth evaluated.

e.. Teacher will provide support and guidance in group conferences.

Fieldtrips and Speakers (1 week +, divided throughout the course)
Opportunities to meet real professionals and tour facilities is an important part of this course. Students will prepare for the speakers and field trips by completing the KWL chart below. They will then write a 2 paragraph reflection about what they learned and how the career presentation impacted their personal goals.
https://www.eduplace.com/graphicorganizer/pdf/kwl.pdf

Scheduled presentation with community industry partners are listed below
Fieldtrips -

Kaiser Center
Laney college - Biotechnology: tour of the CTE accreditation program

Speakers -

Mental Health - panel of clinical and non-clinical professionals
Physical Therapist and Sports Trainer
Nurses - Labor and Delivery nurse and a Critical Care nurse
Physician assistant

Pre-assessment (1 week)
The course will begin with a self-assessment using Naviance. Students will practice self-reflection strategies and techniques to accurately and honestly inventory their skills, talents, interests, experiences, goals, knowledge of available programs of study and the requirements for admission.

Unit 1. BioHealth Breakdown (4 weeks)

1. What is BioHealth?
   Lesson: Students will work with the librarian to learn basic research skills and available databases. They will then form groups of 4 to present a dynamic poster defining BioHealth, including their credible resources.
   (http://www.sanleandro.k12.ca.us/Page/3018)
2. Careers in BioHealth Scattergories
   Lesson: Using their practiced research skills, they will investigate a thorough list of professions in the BioMedical field and present it to the class. Students with careers that no other group listed will get bonus points.
3. Medical Case study: How do the BioHealth professionals help in patient care? Examine a medical case study from start to finish.
   Lesson: Students will pair with a classmate that shares a similar interest in a

similar BioHealth field. They will research to find a relevant medical case study, then dissect it from start to finish. On a poster, they will describe all of the professionals involved in the patient care.

4. History of BioHealth
   Lesson: Students will research in groups of three to jigsaw 3 ft of a 30 ft expanded timeline of BioHealth field. Final product will be presented and posted to above the cupboards.

Unit 2: Exploring BioHealth Careers (7 weeks)

Students will gain a deeper understanding of six BioHealth fields. They will work as class in a jigsaw style to explore the six chosen BioHealth fields for this course: Mental Health, Sports Medicine and Physical Therapy, Biotechnology, Allied Health I, Medicine I, and Dentistry. For each field of exploration, there will be two assignments followed by a presentation of their findings. The unit will repeat assignment 1,2, and 3, six times.

Assignment 1: Road Map It! (2 days)
Students will work in groups of 3-4 to create a large poster size road map that demonstrates the professional career options and salary, skill sets and education requirements and costs in that field of study. Dividing skill sets in the group will allow completion of their poster on time. There will be two or three research specialists and one visual design specialist. Examples of roadmaps, research guidelines and rubrics will be provided in order to better scaffold the exploration and understanding for all learners.

Assignment 2: Career Pathway (2 days)
Students will choose one profession from the list of specified professions of the field of study for that week. They are to develop a slideshow that includes the following points: Education required (including years and cost), desired skill set, salary, benefits of the profession, challenges of the profession and an example of a case study.

Assignment 3: Final presentation (1 day)

a. Students will present the road map poster and the career pathway slideshow to the class. All members will be responsible to share out a slide.
b. Students will present three potential quiz questions which will be used on the unit 2 exam.

Unit 3: Personal Portfolio (6 weeks)

At this point in the course students will be ready to dive deeper into exploration and discovery. Through analysis of science articles, medical case studies, and information from guest speakers, students will deepen their understanding of the health sciences: science concepts, medical terminology, range of health careers beyond “doctor” and “nurse”, and the ethics of health issues. After some time to self-reflect and process newly acquired knowledge, the instructor will meet with each student to choose an area (or areas) of focus to delve into more extensive research. Together, the student and instructor will monitor growth.

Assignment 1: Research Paper: Where Do I Fit into the BioHealth Pathway?

Each student will select an area that they think is the BioHealth pathway of their choice; this will be their major and/or career to explore. Using multiple resources, the students will research college major possibilities and/or a career of interest. This research will be relevant and real world. They will be required to investigate, and ideally visit, programs in the area as well as investigate job openings in the area which they choose to live. Students will also back plan so they can begin to prepare academically for the program of their choice. This investigation serves as the basis to write a research paper on their BioHealth Pathway.

Assignment 2: Interview a Professional
Once they have selected an area of focus and are more knowledgeable of the skills and expectations, the students will interview a BioHealth professional. The instructor will help guide the students in arranging and preparing for the interviews, but the interview process will be conducted completely by the student. Students will write a written summary and reflection of the interview process.

Assignment 3: Education Plan
At this point, students are ready to make some level of commitment to a BioHealth pathway. They will research post-secondary programs (2 and/or 4 year) and the requirements to be accepted to these programs. This information will be used to design a personal academic and career preparation plan.

Assignment 4: Resume - Me at BLANK (insert age here)
The last part of this portfolio unit includes a mock-resume for their ideal job as if they have completed their education plan. Students will use their research, other resume models and examples to help format their resume. In addition, they will extract their strengths and skills learned from Naviance to give it a personal touch.

Final assessment: Mock interview with a panel of Biohealth professionals. Student will fast forward to their future-selves, and prepare for an interview for their first job out of their training (according to their educational path and skills acquired from their mock resume). They will use their research paper, interview, and resume to help prepare them for the mock interview.

Final Course Self-Evaluation and Public Health Presentations (2 weeks)

Evaluation: To conclude this course, every student will complete a self-assessment which will include personal discoveries, areas of growth, areas to focus on, strategies learned to self-advocate, new talents/skills acquired and their value as future health professionals.

Public Health Presentation - Students will present their Peer Education presentation and turn in their evaluation.

21. Instructional Materials:

Board approved required text

N/A

Supplementary materials

computer access; school library, industry partners for field trips, guest speakers, professional interviews; field trips to local community colleges and universities/colleges
(http://www.sanleandro.k12.ca.us/Page/3018)
http://www.breitlinks.com/careers/career_pdfs/Exploration_wrksheets.pdf
https://www.eduplace.com/graphicorganizer/pdf/kwl.pdf
(http://www.biologyjunction.com/prefixes%20and%20suffixes.pdf)
credible current event resources

Kpbs.org
dnews.com
nationalgeoraphic.com
newsela.com
sciencedaily.com
cnn.com
bbc.com
nytimes.com
sciencenews.org
www.biohealthscience.org
www.healthaffairs.org
www.who.int
msn.com
EWG.org
www.cdc.gov

22. Key Assignments

Class participation, weekly vocabulary quizzes, weekly current events in BioHealth, meetings with instructor, major and career exploration: research paper, informational interview of a health professional, design personal educational pathway, academic program and career preparation, mock resume, mock interview, Peer Educator presentation and evaluation, final course self-evaluation

23. Instructional Methods and/or Strategies

The purpose of this course is to engage students in the discovery and learning process. This approach requires active student engagement and participation with the teacher acting as facilitator. Most of the learning will be project based, focusing on real world and relevant topics. Whole class activities will involve sharing ideas, knowledge, careful consideration and challenge of others' ideas, and supporting claims with evidence and

reasoning. Individual study will be self-directed with support from teacher. Teacher will meet with individual students frequently to monitor progress and guide the process of self discovery. While the majority of the learning will be student centered, teacher planning and organization remain valuable requirements. In addition, as the learning is to be student led, the teacher must continuously adjust, amend, and supplement lessons and activities to meet the needs and interests of the students.

24. Assessment Methods and/or Tools

Students will be assessed using multiple measures: class participation, reflections, presentation rubrics, vocabulary quizzes, teacher conferences, major and career exploration research paper, interview (plan, preparation, paper), and final personal plan (academic and career), mock interview, Peer Presentations (peer evaluated) and final course self-evaluation.

25. Grading Policy

Grading will follow the San Leandro Unified School District's policy. It is expected that assignments will be turned in on time. Late assignments will be accepted if student has communicated to teacher the reasons and actions taken to complete the work in a timely manner.

SECTION C

26. Context for Course (optional)

The California Career Pathways Trust is supporting students throughout the state to develop pathways to academic and career success. This grant is supporting schools to "develop and integrate standards-based academics with a career-relevant, sequenced curriculum" as well as "provide articulated pathways to postsecondary education." As part of this work, San Leandro High School is developing a BioHealth Pathway. This elective course, the first step in the development of this pathway, was created to fill an area that does not exist here at San Leandro High School: a course providing the information, education and skills to explore, understand, and plan for college and career. This course will serve to educate San Leandro students, as well as their families, and will, hopefully, be used as a model for the other academies here at SLHS.