

Instructional Program Review Report

Sierra College, 2017-18

Department/Program Name: HEALTH SCIENCES

Date Submitted: February 28, 2018

Submitted By: David B. Sinclair

Ideally, the writing of a Program Review Report should be a collaborative process of full-time and part time faculty as well as the appropriate educational administrator, instructional assistants, classified staff members and students who have an interest in the present and future vision of the program at all sites throughout the district. The Program Review Committee needs as much information as possible to evaluate the past and current performance, assessment, and planning of your program.

Please attach your Department Statistics Report (DSR) and your ePAR Report when sending in your Program Review.

1) Relevancy: This section assesses the program's significance to its students, the college, and the community.

1a) To provide context for the information that follows, describe the basic functions of your program

The Health Sciences Program prepares students to begin immediate careers in prehospital care, allied health care, and public safety. The EMT and EMR courses provide the minimal required training to begin careers as emergency medical professionals in both the prehospital and clinical settings, as well as careers sought as professional firefighter/EMTs, single role EMTs, and even law enforcement. The program has also attracted many students majoring in Allied Health and pursuing advanced training and professional licensing, specifically careers as EMT-P (paramedic), PAs (physician assistants) and RNs (registered nurses).

All of the courses offered in Health Sciences, with the exception of HSCI 03 Medical Terminology, are governed by California laws, rules and regulations written in Title 22, section 100074 of the California Code of Regulations. National and state recognized certificates of completion are awarded for HSCI 02 EMT (Emergency Medical Technician) and for HSCI 07 EMR (Emergency Medical Responder), providing eligibility to qualify for both a national and state certifications that are reciprocal in 48 states. The HSCI training curriculum, certificate courses, and the continuing education program is governed by the State Emergency Medical Services Authority, an executive branch of the California Governor's office, the Sierra-Sacramento Valley Emergency Medical Services Agency (SSV-EMS), the training standards of the National Registry of Emergency Medical Technicians (NREMT), and the U.S. Department of Transportation (DOT).

1a) describe the basic functions of your program: Continued

Program components must meet strict Title 22 compliance with oversight from the Local Emergency Medical Services Agency (LEMSA); the State EMS Authority (EMSA); and the National Registry of Emergency Medical Technicians (NREMT). The EMT program is required to have a designated EMT Program Director with responsibility and oversight of all components in the program. Also required is the designated EMT Clinical Coordinator that has responsibility and oversight of all skills lab training, NREMT final skills testing, and mandated clinical assignments. This includes scheduling and oversight of over 450 clinical assignments and over 5,700 hours of internship. The program clinical coordinator is required to be a licensed paramedic, and must maintain an active license while holding this position. The HSCI 07 EMR certificate program, the HSCI 600 EMT recertification course, and the HSCI 50 paramedic prep course also fall under the responsibility of the EMT Program Director and Clinical Coordinator. The department has only had one (1) full-time faculty to supervise all program requirements and oversight of mandated compliances the past 7 years. A second full-time faculty was hired in fall of 2017.

1b) How does your program support the district mission, as quoted below? Please include an analysis of how your program supports ISLOs (Institutional Student Learning Outcomes): Communication, Technology and Information Competency, Critical and Creative Thinking, and Citizenship?

“Sierra College provides an academic environment that is challenging and supportive for students of diverse backgrounds, needs, abilities, and goals with a focus on access, equity, student-centered learning, and achievement. The college is committed to practicing diversity and inclusion, and recognizes that a diverse and inclusive curriculum and workforce promotes its educational goals and values. Institutional learning outcomes guide the college’s programs and services, encouraging students to identify and expand their potential by developing knowledge, skills, and values to be fully engaged and contributing members of the global community. Sierra prepares students by offering Associate’s and transfer degrees, certificates, career and technical education, foundational skills, as well as lifelong learning and enrichment.”

The Mission Statement of Health Sciences parallels the same values of the District. Our courses provide exceptional education and certificated skills training for starting careers in the Health Sciences, Emergency Medical Services (EMS) and public safety professions.

The Health Sciences Department strives to provide high quality education and professional certifications for individuals pursuing careers in emergency medical services, allied health care professions, and careers in public safety. We provide the curriculum for certificate programs approved by national and state agencies, successfully prepare individuals for national certification, and we update and maintain the knowledge and skills of working professionals. This is provided by motivated and qualified instructors with significant professional experience in emergency medical services, allied health and public safety. We provide an effective and innovative curriculum that promotes high standards and encourages an individual’s potential for success. We follow a national standard curriculum and through education, partnerships and communication, we build safer communities and stronger health care professionals.

1c) Program offerings align with which of the following mission categories (check all that apply):

X Transfer X Career Technical Education
X Basic Skills X Personal Development/Enrichment X Lifelong Learning

1d) Please analyze your department's success in supporting the mission categories marked in 1c above. Please provide evidence in support of this analysis, including data from the dashboard relevant to this evaluation. If any of the following apply to your program, please address them in your analysis.

- Degrees, certificates, and/or licenses your department has generated:
- The alignment of these awards with the district's mission and/or strategic goals. (See the district "Awards Data File, available from Research and Planning, for your numbers).
- Job placement or labor market information for your program's awards and licenses.
- The contribution your program makes to student transfer.
- Participation in basic skills programs.

The Sierra College Health Science program prepares students to enter careers in Public Safety and Allied Health. Students completing the HSCI 2/EMT have successfully passed the National Registry psychomotor skills testing process, and qualify to apply for the NREMT written exam to become eligible for National and State certification. National Certification is reciprocal in 48 states, allowing students to qualify for immediate job placement outside of California. Sierra College students will generally take the national exam within 10 days of completing the EMT course with an 88% overall pass rate on first attempt.

Students are required to perform a minimum of 24-36 hours of a clinical internship and are exposed to the professional settings in both a hospital ER and a prehospital field environment. They are required to exercise their EMT practical medical skills in real patient situations, and obtain a mandated minimum requirement of ten (10) documented patient contacts.

Health Sciences has a new Associate of Science degree that articulates directly with the Bachelor of Science in Health Sciences at CSU (California State University). The department has also arranged a prerequisite transfer to the CSU Sacramento Paramedic program that now recognizes HSCI 02, HSCI 03 and HSCI 50 for acceptance into the Paramedic program at CSUS.

Students immediately qualify for EMT positions that vary from prehospital care providers to positions in acute clinical care. Many of the students are finding immediate employment as emergency room technicians (ER Tech), EMT burn tech, professional EMTs, or they'll return as temporary lab instructors at Sierra College. Some students find employment as seasonal firefighters. A good percentage of our students have even been invited back to work in the hospital emergency departments after completing their clinical internships. Students can also start applying to paramedic programs, or vocational training such as phlebotomy tech. Students that complete the regional fire academy and wish to pursue careers in public safety have been earning paid internships with fire departments throughout the region, where they are able to function in a professional environment as a first responder EMT.

1d). continued

Sierra College EMT students have consistently exceeded the national average for successfully passing the National Registry exam on the first and second attempt. From spring 2013 to fall 2017 there were 784 National Registry Certifications awarded to Sierra College Students.

Following success rates are from spring 2013 to spring 2017.

▪ National average NREMT first time pass rate:	67%
▪ Sierra College average NREMT first time pass rate:	88%
▪ National average NREMT pass rate after 2 attempts:	79%
▪ Sierra College average pass rate after 2 attempts:	94%
▪ Sierra College students attempting NREMT exam:	830
▪ Sierra College students Awarded NREMT Certificates:	784

2) Currency: This category assesses the currency of program curricula as dictated by Title 5 and the currency of efforts in meeting accreditation standards as well as improving pedagogy and engaging in professional development.

2a) Curriculum: Comment on the currency of your program's curricula, including discussion of any recent or projected changes. Please describe your process for evaluating and revising curriculum, including the use of SLOs. Describe and analyze any effects of R4S and other developments in curriculum and program planning.

All of the courses in Health Sciences are required to maintain didactic and psychomotor curriculum that is up to date with mandated local and state requirements. Each of the HSCI certification courses went through curriculum restructuring again in 2017 to meet the upgrade requirements of the NREMT (National Registry of Emergency Medical Technicians), the California EMSA (Emergency Medical Services Authority) and S-SV EMS (Sierra-Sacramento Valley Emergency Medical Services). The EMT curriculum was increased by forty (40) hours and the degree of difficulty of the didactic and psychomotor curriculum increased significantly to prepare EMT students for the national registry certifying exam. Total course hours for HSCI 02 EMT was increased to 200 course hours and 8 units.

The National Registry standards by which the program curriculum is determined is an ongoing process of review and evaluation. Faculty attend county and state wide monthly meetings to remain current with policy and protocol updates from the governing agencies. The Cal EMSA consistently reviews curriculum changes and recommendations by the NREMT and US DOT, and then delegates any new requirements through the local EMS agencies. The program is constantly improving and evolving with professional requirements and student success. Student competency in the SLOs are mandated and part of standardized testing in both cognitive and psychomotor examinations.

R4S committee efforts brought renewed recognition to the Health Science program including participation in the development of the new Allied Health department, and institutional support for an educational partnership that is being developed with the CSUS paramedic program.

2b) Student Learning Outcomes Assessment: Analyze your program's assessment of course outcomes, analysis of results, and improvements/changes made to the program as a result of this assessment. Please provide specific data and analysis in the space provided. In the space below, please describe or attach the cycle you have developed for outcomes assessment.

The student learning outcomes for the Health Sciences curriculum are mandated and determined by the state EMS authority, the local EMS agency, and the department of transportation. Instructors are legally mandated to insure that all of the SLOs are met before a student is given clearance to sit for the national registry examinations. The entire EMT training curriculum is designed to complete multiple outcome assessments with every single student. The same assessment process is used for the HSCI 07, HSCI 50, and HSCI 600.

All five (5) of the Program Outcome Assessments were reviewed without any necessary changes, and the six (6) course assessments of HSCI 3 were reviewed with favorable results. All assessed outcomes also were consistent with the standard outcome requirements and recommendation of the National Registry, the DOT, and the California State EMS Authority curriculum outcome requirements for EMT and EMR certification eligibility.

2c) Professional development: Please describe how your department's individual and group activities and professional development efforts serve to improve teaching, learning and scholarship.

HSCI instructors are full-time professionals in the field, are state licensed paramedics and they're required to complete forty-eight (48) hours of CE's (continuing education) at the EMS level every two years. The HSCI instructors also hold ranks of fire captain, battalion chief and field supervisors, where they regularly attend/conduct ongoing department training and education required of their respective agencies. This type of specialized training brings current up-to-date information back into the classrooms, as well as their on-the-job EMS field experiences to share with students.

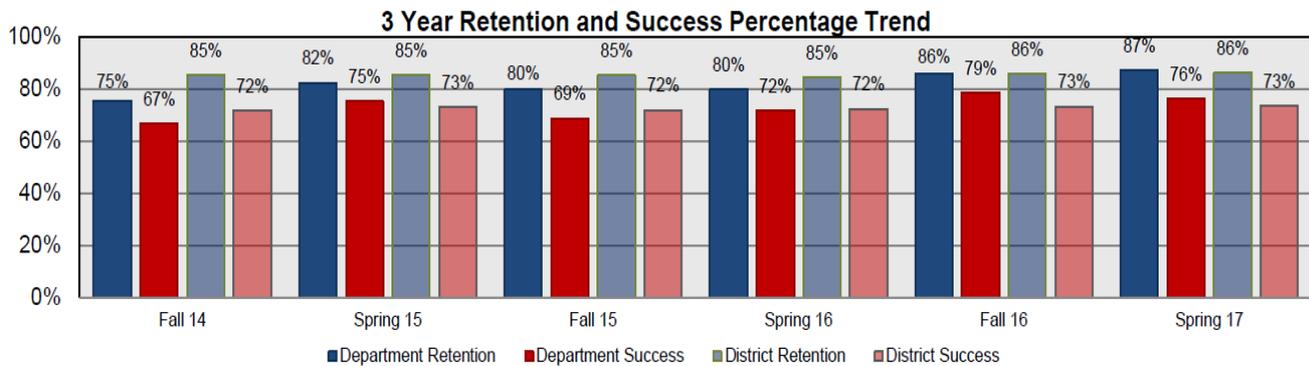
Instructors attend nationally sponsored conventions for EMS (emergency medical services) professionals and EMS educators, and participate in committee work on curriculum writing and national registry testing development. One of our adjunct faculty serves on the testing research and question development committee for the National Registry of Emergency Medical Technicians (NREMT).

The departments Instructors also consistently participate as members of hiring committees, occupational testing, and interview panels. They bring key points back into the classroom for future candidates as well as current hiring practices and the desired candidate qualifications of major public safety and EMS employers.

The HSCI department conducts several staff meetings each semester and maintains ongoing levels of active communication for constant review of instructional methodology that to ensure that there is instructional consistency in the delivery of the curriculum.

3) **Effectiveness:** This section assesses the effectiveness of the program in light of traditional measurements.

3a) Retention and Success: Identify and explain the three-year trends in your program’s data contained in the DSR and analyze any relevant information found in the data dashboard related to retention and success. Address separately the data for on ground and on-line course. Evaluate the significance of the trends, including any challenges experienced by the program and any relevant data/analysis from your course and program outcomes assessments. Please analyze any significant trends related to student equity and success. If you determine that you need to improve the program’s performance, please describe how you plan to achieve this goal. Please include the results of your outcomes assessments, as appropriate



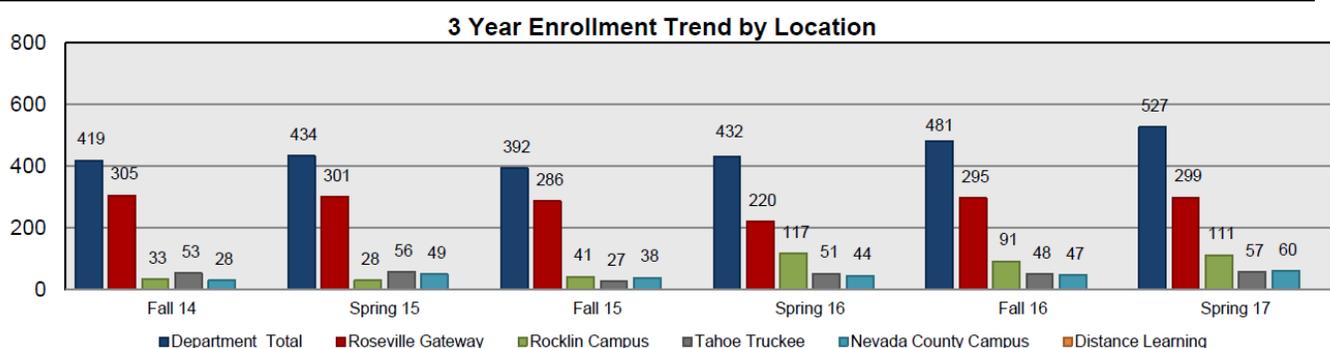
Health Sciences 3 year retention average is 82%; slightly below the district average of 85%. The 3 year average for course success is 73% compared to a district average of 73%. However, in Fall of 2016 and Spring of 2017 the departments average retention rate increased to 86.5% and the success rate increased to 77.5% nearly over 5% higher than the district average.

Several department revisions were made to improve student retention and success. In 2016 the EMT courses were changed from one (1) day a week, to two (2) days per week. This changed the duration of classroom time from eight (8) to four (4) hours. There was also an increase in clinical observation time offered to students, providing more time to experience a realistic working environment in a professional setting. In 2017 changes were also made to the grading system for HSCI 02 students. The revision to grading will reflect a more traditional range and increase the number of successful students while increasing the department’s retention. Previously, students were required to earn 80 percent in the course to receive a “C” and be considered successful. Students will now earn a “C” between 70 and 79 percent, and the eligibility to take the national registry EMT exam will not be compromised.

In the spring of 2018 the department revised the review process of EMT program requirements including immunizations, drug screens and background checks. The Sierra College Health Center staff now review and approve the student medical records to insure mandatory compliance for clinical assignments. The HSCI department also extended previous deadlines to complete these requirements, and has seen a 98% retention of new EMT students, as compared to a 15-25% loss previously seen in the past. The new review process has quickly proven to be successful in student retention.

3b) Enrollment Trends: Identify and explain the three-year enrollment trends in your program’s DSR data. In addition, analyze any relevant information found in the data dashboard related to these trends. Address separately the data for on ground and on-line, as well as the data at the various centers in which your program may operate. Evaluate the significance of the trends including any challenges experienced by the program. Please analyze any significant trends related to student equity and success. If you determine that you need to improve the program’s performance in any way, please describe how you plan to achieve this goal.

Enrollment by Location	Fall 14	Spring 15	Fall 15	Spring 16	Fall 16	Spring 17	3 Yr Avg
Department Total	419	434	392	432	481	527	448
Roseville Gateway	305	301	286	220	295	299	284
Rocklin Campus	33	28	41	117	91	111	70
Tahoe Truckee	53	56	27	51	48	57	49
Nevada County Campus	28	49	38	44	47	60	44
Distance Learning							#DIV/0!



The Health Sciences department shows consistent enrollment numbers with little measurable difference between spring and fall. There have been steady increases in student enrollments for all sections, with HSCI 02 and HSCI 03 courses reaching maximum capacity, and carrying a wait list during the enrollment period. This has been a normal pattern that’s remained consistent every year.

In the fall of 2017, the new Roseville center opened and more classrooms became available for Health Science sections. Since the spring of 2017 the department has increased the number of sections by eight (8). Three (3) new sections of HSCI 003 (medical terminology), two (2) new sections of HSCI 02 (EMT) and an additional section of HSCI 50 (intro advanced life support). There are also three (3) new sections of HSCI 07 (Emergency Medical Responder), one (1) new section offered at the Tahoe Truckee campus. Another section of HSCI 07 is now offered at both Del Oro and Placer High Schools as dual enrollment courses. HSCI 03 will also be offered fall 2018 at Del Oro high school in Loomis, and possibly Placer High school in Auburn.

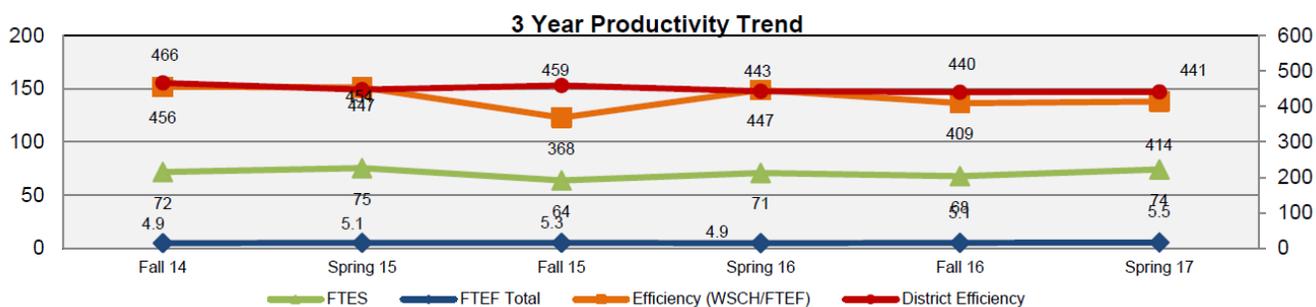
The six (6) HSCI 12 sections (CPR and Infection control) have been removed as corequisites, and the hours and curriculum were added into the HSCI 02 courses. Two new courses have been written for the department and one has already gone through curriculum. A second Health Sciences A.S. degree in EMS has being developed and will be ready for submittal to curriculum in March 2018.

3b). Enrollment Trends: continued

Enrollment at all four centers is expected to remain consistent as more students are looking for professional certifications, and EMT and EMR remain the primary or minimal requirements for numerous Allied Health and Public Safety occupations. HSCI courses also meet the minimum required prerequisite for vocational training programs such as the Advanced EMT training, Paramedic training programs, and eligibility for the Sierra College Regional Fire Academy.

With the additional option of earning an Associate’s Degree in Health Sciences, the enrollment demands for the HSCI courses are expected to steadily increase within an already impacted program. The department has a high percentage of enrollments that are re-entry or career change students. Most are completing mandated prerequisites required for a paramedic program, physician’s assistant, or for a registered nursing program. Sierra College has seen a lot of its HSCI students leave to enroll at other educational institutions, to seek out Allied Health programs that will complete their education, stack their certifications, and provide occupational training with career opportunities.

3c) Productivity: Comment on how the program contributes to overall district productivity. Evaluate the significance of the trends including any challenges experienced by the program. If you believe the statistical trends need improvement, and can be affected by your actions, If you determine that you need to improve the program’s performance in any way, please describe how you plan to achieve this goal.



Health Sciences productivity has been closely paralleled with the district over the past three years, despite attendance drops in fall 2015. Overall FTES has remained consistent with some measurable improvements. The program has seen growth primarily due to the increase of required course hours and adding some additional sections. Since spring 2017 the department has added eight (8) additional HSCI sections and student enrollment has been consistent with few class cancellations.

The HSCI department productivity has always been a challenge due to positive attendance and the level of difficulty with ongoing updates in curriculum and course mandates. Increases in course hours, curriculum content, updated skills in the EMT scope of practice, and the increases in anatomy, physiology and pathophysiology have increased the critical thinking requirements of EMT students. Faculty challenges trying to help these students successfully complete a demanding EMT course, and prepare them for the national registry certifying exam have become increasingly

3c) Productivity: continued

more difficult. New students are not being counseled to follow the advisory and complete HSCI 03, HSCI 07 and BIO 55 prior to taking the HSCI 02 EMT course, placing both students and instructors into an academic overload, and increasing the numbers of failures and early withdrawals.

The department has made some recent changes to hopefully retain students and inspire their success by improving the grading system, and offering more clinical experience to the students. Dual enrollment HSCI 07 courses are now being offered at local high schools, as well as adding three (3) additional sections of HSCI 03 at the Roseville and Rocklin campuses. A new anatomy and pathophysiology course designed specifically for EMS professionals should be available by fall '18 or spring '19. The EMT class scheduling was modified in fall '17, with the new option of a late start accelerated course, as well as additionally offering two (2) new EMT night courses.

Implementing course prerequisites have been met with resistance due to enrollment concerns for the Sierra College Fire Academy. However, HSCI department has seen a decline in the fire technology majors, and an increase in students pursuing careers in Allied Health including careers in the single role EMT and Paramedic professions.

The department will continue to explore the idea of a mandated prerequisite for the EMT program, and will also increasing the number of sections of HSCI 03 and HSCI 07 to hopefully see more counseling and promotion of the advisory courses for EMT.

3d) Analysis and Planning: Referring to your ePAR Report of Goals, Strategies, Actions, and outcomes assessment cycle and relevant assessments/evaluations, please describe your program's plans to maintain or increase its effectiveness and analyze and evaluate your efforts to achieve these goals. Please describe and analyze the impact of any R4S initiatives on your program and incorporate any relevant information in the data dashboard related to student success, equity, and other measures of success including any relevant information addressed in sections 2 and 3.

There were (7) department goals and strategies identified in the 2017 PAR report and goals summary. Several goals are still active projects with current research and progress toward development, and approaching completion.

1). *Develop a transferable A.S. degree in Health Sciences:* This goal has been completed and is now offered in the college catalog. This degree articulates directly with the Bachelor of Science degree at CSU and is part of an educational pathway into numerous Health Science professions. The second Health Science A.S. degree is in EMS, and is more specific to occupations and careers in emergency medical services. This degree is now ready for submission to curriculum.

3d) Analysis and Planning: continued

2). *Research and develop an Educational Partnership between the California State University Sacramento Paramedic program and Sierra College:* Research has been in progress for over a year with both CSUS and Sierra College administrators and faculty working together. The Sierra College Academic Senate has given unanimous support to move forward in developing this proposal, and the instruction office has approved the support to develop the partnership.

3). *Develop a Health Science A.S. degree in Paramedicine:* This goal will be a result part of the educational partnership between Sierra College Health Sciences and the CSUS Paramedic program. Curriculum has already been started in developing these courses

4). *Develop an educational Pathway with dual enrollment sections offered in the Placer Unified High School District:* This goal has been successfully accomplished, with HSCI 02 EMR courses being offered in the fall 2017 at Del Oro high school, and currently at Placer High school, spring 2018. HSCI 07 and HSCI 03 will both be offered in the fall 2018 at Del Oro high school.

5). *Develop new HSCI courses in Human Pathophysiology and Ethical-Legal:* This goal is near completion with HSCI 30 “Functional Anatomy and Pathophysiology for EMS” written as a completely new course and approved through curriculum. It currently is in the approval process at the CCC Chancellors office, with anticipation of being offered in fall of ‘18 or spring ‘19. HSCI 31 “ Ethics, Street Cultures and Legal Issues in EMS” has been written and is currently waiting to be submitted through curriculum for review.

6). *Increase the number of HSCI Sections to be at all four campus locations:* Since Spring of 2017 there are now a total of eight additional new sections. The Nevada County campus successfully added a new section of HSCI 07 in fall of 2017, but was unsuccessful in filling the same section the following semester. The Truckee campus added a new section of HSCI 07 Spring 2018 and has successfully filled this course with 25 new students.

7). *Provide Legally Mandated Clinical and Faculty Support to the Program:* HSCI has been requesting a separate Clinical Coordinator in PAR request since 2012. This position is mandated per Title 22 guidelines and required by Local EMS agencies to insure the program remains compliant with psychomotor skills and clinical assignments. A clinical coordinator is solely responsible for the quality assurance of all practical skills lab instruction for HSCI 02, 07, 600, and 50. These responsibilities increase each year and consist of 60-80 hours each semester of clinically mandated tasks. The responsibilities have been covered by the department chair without compensation or release time, despite continuous requests. This is a mandated and focused position and should be considered for a “Lead” position as similar positions are assigned to accommodate Fire Technology and Administration of Justice.

4) Resources: This category assesses the adequacy of current resources available to the program and describes and justifies the resources required to achieve planning goals by relating program needs to the assessments above. (Refer to the bottom row of your DSR in your response to this category. You may include budget information if you have it.)

4a) Please describe the future direction and goals of your program for the next three years in terms of sustaining or improving program effectiveness, relevance, and currency; include any analysis of R4S initiatives in the development of these goals and plans. Please incorporate analysis of any relevant outcome or other data in this description, including any data from the dashboard.

Health Sciences has an established goal to complete an occupational pathway for students interested in pursuing careers in Emergency Medical Services, Integrated Mobile Community Health Care, Public Safety, and an optional pathway to pursuing any career in the Allied Health Field. This plan was started before R4S initiatives were introduced, but has received significant support and is in align with R4S and strong workforce initiatives.

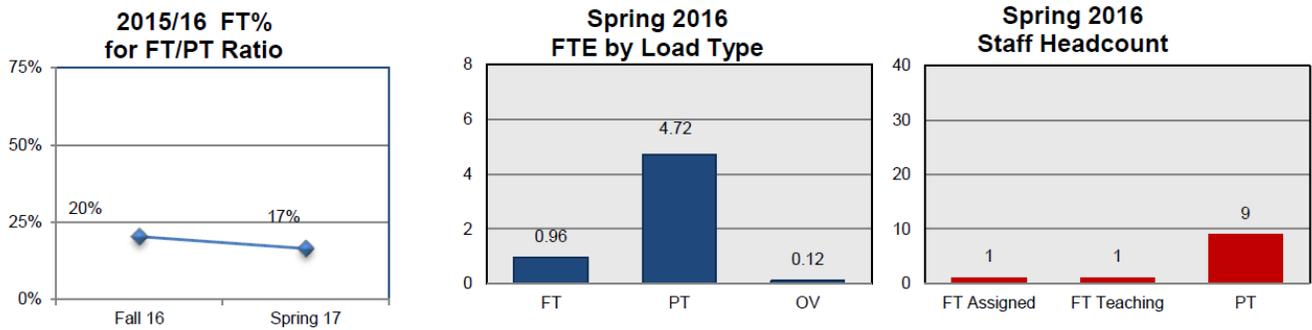
Heath Sciences plan will be completed in three years, and the department has already built a strong foundation in establishing this goal. When completed, this will include a career pathway in the discipline that will start at the high school level for Junior and Senior year students. High schools will be offering HSCI courses with state certifications and academic preparation for career mapping, and three (3) different degree tracts to be offered through Health Science at Sierra College.

The pathway will conclude with eligible students entering the CSUS paramedic program to earn a professional license and A.S. degree, established through the educational partnership. Or transfer directly into the CSUS Health Science, Bachelor of Science program, or for some students to even pursue both options.

4b) Equipment and Technology: Comment on the adequacy of the program’s equipment and technology funding level for the District as well as for specific sites, including a projection of equipment and technology needs for the next three years. Please provide a justification for these needs, incorporating relevant assessments of the data above in this explanation.

All four campuses have “Smart Classroom” technology. State-of-the-art training equipment has been purchased through CTE funds to keep up with industry changes, and current training equipment to support any new levels of training for EMR, EMT or even a paramedic training program. Additional training equipment and medical supplies would still be required, however the program is sufficiently supplied by current standards, with any future equipment purchases available through CTE funding. The program also has two functional ambulances, a type II van and a type III modular unit that will bring a new level of realistic training into the program. These units will also allow for a broader training level of psychomotor skills, and extends classroom training into more realistic field environments.

4c) Staffing: Comment on the adequacy of your program’s faculty, classified, and student help staffing levels for the overall District as well as specific sites, including a projection of staffing needs for the next three years. Please provide a justification for these needs, incorporating relevant assessments of the data above in this explanation.



Faculty: The ratio for full-time to part-time instructors has been substantially inadequate the past six years. An additional full-time faculty member has been requested every year and was finally approved in 2017. The new faculty started in fall of 2017, and has improved the department needs, but the current staffing remains inadequate. The ability to keep up with the constant growing demands and mandated requirements are becoming significantly more difficult. The new ratios with two faculty are not reflected accurately in the above data.

Instructional Assistant: In 2012 the previous instructional assistant retired, and majority of the IA responsibilities, daily assignments and commitments to assisting the program, have since been realigned to Fire tech and the fire academy. The program demands continue to grow through curriculum increases, clinical requirements, and additional sections with less IA support. Additionally, the current IA has numerous off campus tasks, and is frequently unavailable during the week.

Lab Instructors - **Immediate Critical Need:** The lab instructors are temporary employees and are required to reapply to the college each year. The program depends heavily on both paid and volunteer to staff these positions in all HSCI courses with the exception of medical terminology. The positions are mandated, required by law as outlined in Title 22, and the program is required to have qualified lab instructors to remain in compliance with local and state EMS agencies.

These lab instructors are successful HSCI students, and have required instructional skill competencies that are not unlike those required for adjunct and full-time faculty. The Lab Instructors are only compensated at \$16 per hour, an amount last adjusted in 2003, and is now exceeded by \$6 to \$10 more per hour by other colleges and institutions within the neighboring region, including Yuba, Los Rios, and CSUS.

Recruitment for new lab instructors has become a time consuming and ongoing task. Scheduling for the current semester has reached a critical level, as lab instructors are cancelling at the last moment for other higher paying jobs, even as lab instructors for other institutions. The current allotted compensation budgeted for IA staffing is so severely insufficient that the program has become dependent upon volunteers to meet mandated (instructor-to-student) ratios. Requests have been continuous in ePAR, updates to the division have been unsuccessful over the past 7 years, and Health Sciences has not been given any consideration for Strong Work force funding.

4d) Facilities: Comment on the program’s fill rate and the adequacy of the facilities for the District as well as specific sites, including a projection of facility needs for the next three years. Please provide a justification for these needs, incorporating relevant assessments of the data above in this explanation.

Health Sciences recently moved into the new Roseville Center in fall of 2017, with dramatic improvements to everything from the environmental and professional atmosphere, to a much safer setting, with dependable heating and ventilation system. The Health Science classroom sizes were substantially smaller than the departments requested specifications when the new building was in the blueprint stage. Classroom size went from occupancy loads of 49 (at Roseville Gateway) to 32 at the new Roseville center. This has been an issue for enrollment capacities especially in HSCI 02 courses. Even with additional sections offered to accommodate to the demand for HSCI, there are still numerous students that were unable to enroll in a EMT course.

Significant research and study has gone into building a new a Public Safety Training facility to accommodate the regional Fire Academy and the Administration of Justice POST academy. The HSCI department will share some interest and be included in the planning and development of this project with an opportunity for larger classrooms and skills lab breakout rooms.

4e) Please check the appropriate boxes in the chart below indicating the general reasons for the resource requests described above (please check all that apply):

Function/Role	Maintenance	Development	Growth	Safety	Outcomes	Other success measures	No Requests
			X				

5) Summary/Closing

5a) Based on the analysis above, briefly summarize your program's strengths, weaknesses, opportunities, and challenges.

STRENGTHS

- A strong professional and vocational discipline with significant career opportunities.
- One of the most researched and requested career paths in the Allied Health Sciences.
- Full and PT Faculty are professional and highly experienced instructors in the industry.
- Strong collaboration with CSUS, local fire agencies, hospitals and EMS Providers.
- Exceptional reputation for the quality of training and student success rates in the field.
- One of the highest state and national success rates for passing of NREMT exam.
- One of the highest numbers of National and State Professional Certificates awarded.
- Largest EMT program in the nine (9) county region governed by SSV-EMS.
- One of the largest EMT and EMS programs in the state of California.
- Meets/exceeds district enrollment, retention and success rates.
- High student success rate at other colleges, universities and vocational institutions.

WEAKNESSES

- Insufficient staffing of PT and FT faculty for the program's legally mandated workload.
- Insufficient faculty support to manage department needs and compliance oversight.
- Insufficient administrative support or knowledge of compliance and program mandates.
- Insufficient classified support to manage the program curriculum and mandate workload.
- Program lacks a separately assigned Clinical Coordinator for compliance responsibilities.
- Program does not offer a complete EMS educational curriculum for professional careers.
- Inadequate classroom facilities for enrollment, department growth or program improvement.
- Inadequate compensation for the paid Lab Instructors mandated for EMT skills training.
- Inadequate funding provided to remain in compliance for Lab Instructor coverage .
- High turnover rate of qualified Lab Instructors mandated for the EMT skills training.
- Using minimal/inadequate qualifications of Lab Instructors for mandated skills training.
- High transfer rate to other institutions offering different levels of vocational training.

OPPORTUNITIES & CHALLENGES

- Explore feasibility to transfer HSCI department into the new Allied Health program.
- Provide acceptable compensation and staffing levels of skills Lab Instructors.
- Address and correct the immediate critical need for the HSCI Lab Instructors.
- Provide a Clinical Coordinator Lead position with a qualified PT or FT faculty assignment.
- Complete development an educational partnership and with CSUS Paramedic program.
- Complete development of Health Science Associate Degrees in Paramedicine and EMS.
- Complete the HSCI career pathway program starting with Placer Unified high schools.

5b) How has the author of this report integrated the views and perspectives of stakeholders in the program?

The majority content of this report has been through some meetings and discussions with full and part-time faculty, HSCI Students, clinical lab instructors, and contributing members of the Departments Advisory Committee. A draft of this report was made available to the department faculty, staff, and a sampling of students. The views and perspective feedback were taken into account when developing the final report.

The process of obtaining feedback and integrating the views and opinions of part-time faculty about the same as previous program review. However, time constraints, inconsistencies in Division leadership, other department responsibilities, and minimal department resources make it extremely difficult to integrate the ideas and support other all faculty or division administration.