Public Health

ACADEMIC UNIT REVIEW FINAL REPORT

October 2019



OFFICE OF PLANNING & ASSESSMENT

INTERNAL REPORT



Department of Public Health 2019 ACADEMIC UNIT REVIEW INTERNAL REPORT

<u>External Reviewers</u> Amy Versink Nowak, Applied Human Sciences, University of Minnesota Duluth Stephen Gambescia, Health Services Administration, Drexel University

> <u>BYU INTERNAL REVIEWERS</u> Mark Widmer, *Review Team Chair, Experience Design* Mark Callister, *Communications* Richard Fry, *Technology*

> > **On-Site Visit:** 10/10/2011 **Date Prepared:** 10/30/2019

UNIT REVIEW OVERVIEW

The internal review committee is extremely grateful to the Department of Public Health for their full and enthusiastic engagement in the review process. We are also grateful for the time and expertise of the external reviewers and for their insightful feedback. Faculty, staff and students provided clear and candid feedback regarding the status and functioning of the department. In addition, the Self-study was thorough, clear, and provided great detail.

The incredibly strong sense of unity, support and genuine friendship among the faculty is both noteworthy and striking. Without exception, faculty express high levels of satisfaction with their experience in the department, with colleagues and with students. A similar level of satisfaction among faculty was expressed regarding their department chair. A major effort has been undertaken to re-envision and implement a new curriculum resulting in successful CEPH accreditation at the undergraduate level in addition to the existing accreditation at the graduate level. Faculty and students are engaged in a range of inspired and experiential learning programs including internships and study abroad experiences. The entire faculty are active scholars. Some of the provided mentored research experiences. The department has successfully recruited excellent faculty and made substantial progress in increasing diversity. The department should be commended for these efforts and continued desire to maintain excellence.

UNIT PROGRESS AND PLANS

Improvements and Progress since Last Review

Clear effort has been made to address each recommendation in the 2013 internal unit review. The name of the department was changed from Health Science to Public Health in 2018 and the mission was revised in 2015. This mission is to become the best standalone academic public health program in the world. The focus on global health was changed to a focus on health promotion at regional, national and international levels. In 2017, a new undergraduate curriculum was implemented resulting in accreditation. Graduate passage rates of the certification exam are 20% above the national average.

Steps have been taken to manage growth in enrollment, including new hires and curricular changes. The external reviewers indicated the department may need to consider enrollments in the different programs and have a plan to accommodate the goal of increasing enrollment by 10% over the next few years. International internship and study abroad opportunities have been developed to provide meaningful experiential learning and mentored research experiences. Growth in enrollment put increased pressure on academic advising. Two new hires have been made since the last review in an effort to provide appropriate advising. In addition to improving advising, some steps have been undertaken to provide support for job placement.

Alignment with University Mission

The mission and vision of the department are clearly aligned with the university. The mission of the department is "to promote health worldwide through transformative teaching, research and service in an environment that builds faith and testimony" (Self-study, p. 14).

Priorities to achieve the vision and mission include:

- Enhance teaching and learning
- Conduct meaningful research
- Enhance faculty expertise
- Nurture alumni and donor relations
- Prepare students to enter graduate school and the workforce

STRENGTHS

- Self-reflection and intentional change
- Focus towards health promotion
- New curriculum and accreditation

CHALLENGES

• Managing student demand

• Faculty load across responsibilities (e.g., mentored research, internship supervision, etc.) and finding mechanisms to reward unique service roles

PROGRAMS AND STUDENTS

General Program Overview: Current and Planned Future Programs, Student Mentoring, Continuing Education Courses, Service Course Offerings

The Public Health Department offers a BS degree in Public Health with four emphases: Environment/Occupational Health, Epidemiology, Health Promotion, and Health Science. In addition, it offers a Health Education Minor, and a Master's of Public Health Degree. Soon after the last unit review, the department discontinued the School Health Education major, but retained the minor.

Internships are required for three of the four emphases: Health Promotion, Health Science, Environmental/Occupational Health. The Self-study document implies that these experiences are considered a "Capstone" and happen near the end of their undergraduate education. Students mentioned the benefit of having more internships, or in having job shadowing experiences earlier rather than later in their educational experience.

There is strong evidence of student mentoring, especially in the area of faculty/student research and publication opportunities. The self-study notes that in 2018, a total of 345 students (both graduate and undergraduate) participated in 166 mentored activities. Of the 49 journal articles published by the faculty during 2018, 22 involved students. Of particular note are the internship and study abroad opportunities within the department.

Programs: Learning Outcomes, Assessment Processes, Present and Future Issues Impacting Programs, Enrollments

The learning outcomes for the Public Health BS Core, and each of the four emphases, have clear direct and indirect measures. Most of the specific measures are being met at either the "Good" or "Excellent" level but there are specific cases (around 13% of the LO) where individual measures are evaluated at the Fair or Poor level.

At the time of the previous unit review (2013) there was evidence that growth in enrollment would be a continuing problem. During this review cycle, fall-winter enrollments for the undergraduate programs started at 647 students in 2013 to a peak of 790 students in 2017. Of the four emphases, Health Promotion and Health Science are the most popular with 4 to 5 times the number of students as the Epidemiology and Environmental/Occupational Health emphases. Environmental/Occupational Health emphases are offered, discussions on the option have begun. As indicated by the

external reviewers, developing and implementing online course offerings will move the department towards achieving the President's goal of undergraduates completing at least 15 credits online before graduation (External Review, p. 2). Online courses may also support the achievement of other goals such as reducing teaching loads from 2-2-1 to 2-2-0, managing increased demand for the major, and the goal of increasing university enrollment by 10%.

One concern centered around the absence of "ethics" in the curriculum. The external reviewers recommend adding ethics content to an existing course or developing a dedicated ethics course (p. 4).

It is obvious that Public Health has a strong culture of self-reflection and ongoing assessment. Their most recent redesign of the undergraduate curriculum is a good example. Not all of the faculty are converted to the new curriculum, but they are supportive of the process and committed to ongoing efforts.

Students: Satisfaction, Demographics, Admission, Recruitment, Advisement

In 2018, 69% of Public Health majors were female and 75% US Citizens. All undergraduate programs in the department are open enrollment. With few exceptions, the majors in the Department of Public Health appear to be "discovery" experiences for the students. Most students don't come to BYU to study Public Health, but they *discover* it sometime after arriving. The average years to graduation for those students who came as true freshmen is just below six years. The external reviewers comment that the time to graduation "seemed very high" (External Review, p.2).

Undergraduate students were noticeably positive when talking about their experiences in the department. They recognized and appreciated the changes to the curricular structure and focus that happened in 2018, and also recognized the difficulties as faculty align themselves with the new structure, approach, and delivery of new material. It was obvious in discussions with faculty that undergraduate students' concerns were being addressed in the normal process of continuous improvement within the department.

Another concern in the Self-study and external review was the responses on the senior and alumni surveys to the question, "If starting over, would you choose to graduate with the same major?" The average combined percentages of seniors answering "Probably" or "Definitely" was around 57%. On the alumni survey, the average combined percentage that answered "Probably" and "Definitely" was 42%. According to the Self-study, although 40% of the students anticipate being "employed full-time in public health," three years later that percent dropped to only 25%. Further probing into the reasons behind these percentages would be important.

Although internship and study abroad experiences were discussed previously, students mentioned that having internship or "job shadowing" experiences earlier in their educational experiences would be beneficial.

Undergraduate students had a difficult time articulating their marketable skills gained through their degree experience, and during a team discussion session, the external reviewers remarked that students could not articulate how skillsets differ between emphases.

STRENGTHS

- New curriculum redefinition
- Accreditation/certification
- Mentored learning opportunities with faculty
- Internship requirement/opportunities for international experiences

CHALLENGES

- Continued refinement of new curriculum
- 6 years to graduation
- Enrollment pressures
- Increasing the number of alumni who feel that their BYU education prepared them for their current job

Graduate Programs

The Master of Public Health (MPH) degree is a two-year program with an emphasis in health promotion. On average, the program admits between 23-26 students each year. All faculty members in the department have graduate faculty status and assist in advising the graduate students.

The graduate faculty seem satisfied with admissions into the program. The percentage of female students is high, ranging from 84% in 2014 to 76% in 2019, with the percentage of non-US citizens staying fairly consistent between 10-20% during that time frame (Self-study, pg. 52). From their very first contact with the graduate program, the students feel supported. They mentioned the tremendous help from secretaries, advisors, and other department resources when applying and transitioning into the program. The students appreciate the excellent orientation meeting upon arrival with its focus on expectations, available resources, and exposure to faculty members. They also favorably commented on the quality of advising they receive.

Students believe the faculty members are highly invested in them and readily accessible. The faculty are perceived as well-qualified, passionate, and provide innovative teaching and group work. The course projects are interesting, applied, and translate into marketable skills for future employment. They also appreciate the guest speakers that come to discuss career opportunities and provide insights into the field.

We found a high level of collegiality and enthusiasm among the graduate students. The students observed that their cohorts are very cohesive, supportive, and work well

together. The enthusiasm and satisfaction they have with their program seems high, and provides a consistent assessment when juxtaposed with the 2013-2019 MPH exit survey which shows that the percent of graduate students rating their educational experience as "good to exceptional" was 95% for professional training, 98% for quality of teaching, and 91% for quality of advising (Self-study, pg. 51).

Present and Future Issues.

The students also mentioned some opportunities for program improvements. For instance, some students felt unprepared for the research focus of their first-year experience. They discussed the possibility of a three-week primer before the first semester begins on how to do research (e.g. write an intro., literature review, methods sections, using Endnote, databases, annotations, etc.). The external reviewers suggest that the primer could be an online course (External Report, pg. 5). Students also suggest that the research methods course be taught the first semester and not second semester, with Biostats taught earlier. Having more research training, they believe, will help them perform better on the IMA World Health Organization project. They feel that the learning curve for the project is so steep that it is difficult to, "dig into the theory and apply it." In addition, they suggest the program offer the theory class the second semester, believing it would fit well with the program planning course.

Additional suggestions regarding the curriculum include the following: more content on a broad range of health topics; more opportunities to take electives; a grant writing class; more training on program design, development, and implementation; training on how to evaluate programs, more guidance on how to apply theory to projects, more career training, a policy course, and survey design instruction that aligns with theoretical frameworks.

While graduate students receive training in qualitative and quantitative research, some students expressed a lack of confidence in conducting research. This feedback is perhaps further reflected in the results of the learning outcome focusing on the use of "appropriate qualitative and quantitative research methods to conduct public health research and evaluation," where on the HLTH 604 final exam, only 44% of the students scored 80% or above.

And finally, when asked about the ethics training they receive, some students feel that instruction could go deeper. Current ethics training, they believe, is more focused on cultural sensitivity, but could extend to broader issues relevant to public health practice. The external reviewers saw a "gap in not offering a *public health ethics* course in either the BS or MPH program" (External Report, pg. 4).

Student Performance

From 2014-2019, the MPH students have performed extremely well on the CEPH exam. The passing rates are very high, consistently in the upper 80s to low 90s. With only a few exceptions, the assessments on the MPH learning outcomes show "good" to "excellent" performance on the various measures. Graduate faculty seem pleased with the quality of students, noting their intellectual talents and professional demeanor.

STRENGTHS

- Strong advising and supportive staff
- High-quality students that form a cohesive, collegial, supportive cohort
- Healthy enrollment levels
- Highly invested, passionate, and innovative graduate faculty
- Ample opportunities to engage in applied research and connection to industry
- Good diversity among students

CHALLENGES

- Opportunity to strengthen new student research skills prior to course research projects
- Need for greater guidance in the application of theory in research and practice
- Possible need to change sequencing of first year theory and research courses
- Greater ethics training, perhaps in the form of a designated course

FACULTY

Faculty Composition

The Department of Public Health has 20 full-time faculty. Seven are female and 13 are male. An additional 14 adjunct faculty work in the department; twelve are female and 7 are male. Fourteen of the current full-time faculty have CFS, and six are on the CFS track. Due to increased enrollment, the number of courses taught by full-time faculty increased from 75 to 93 between 2013 and 2018. Faculty teach an average of 11 course credit hours in an academic year. Two faculty now serve in upper administration. Consequently, covering all sections of courses is a challenge.

The external reviewers wrote, "The BYU Public Health faculty strike us as an engaged, student-centered, research- and scholarship-minded group who find ways 'to get things done" (External report, p. 7). The internal review committee concurs. The faculty appear to be happy with the new building where they reside and also with the internal funding that supports research, the purchase of equipment, and travel. The CTL has also provided support for faculty development.

Citizenship, Teaching, Scholarship

Thoughtful consideration is given to citizenship assignments within the department, providing pre-CFS faculty with time to develop and become successful. It appears faculty are fully engaged in citizenship. In addition, an intentional effort has been made to create efficiencies and reduce the number of faculty meetings. Articulating the value and contribution of more obscure citizenship activities such as guest lecturing, writing letters of recommendation, editorial work, and counseling students is an ongoing challenge.

Teaching assignments are fair and equitable. Lighter loads are provided for pre-CFS faculty to support their success in the process. The curriculum has been adapted to meet accreditation standards. In the context of the new curriculum, an effort has been made to align faculty teaching expertise and interest with courses they teach. As mentioned, the department has lost some talented faculty to administrative positions, impacting some areas of the curriculum.

The department reports high levels of faculty engagement in scholarship and an increase in formal scholarly collaborations within the department and with partners nationally and internationally. Faculty performance indicators, however, suggest the number of publications per faculty have decreased over the past 7 years. We suspect this is in part due to the fact two faculty are now full-time administrators. Nonetheless, the number of presentations has increased over this timeframe (Self Study, Appendix 36). The external reviewers indicate the level of scholarly productivity in the department is "respectable" (External report, p. 7). They further indicated the faculty are leaders in their respective fields.

Rank and Status Expectations

The internal review committee asked all pre-CFS faculty and those recently awarded CFS and promotion about the department rank and status document and process. Without exception, faculty reported believing the CFS expectations are clearly articulated and the review process is fair. They further indicated receiving mentoring and other support. Associate professors seeking full professor also reported believing the document and process are clear and fair. Clearly, faculty satisfaction reflects a robust document and fair review process. The Self-study outlines steps the department has taken to achieve this level of approval and trust. Efforts focus on mentoring, a strong rank and status document, and annual stewardship interviews that emphasize accountability and support. We underscore that faculty satisfaction with the current department chair's role in this process and his leadership are extraordinary.

Mentored Research

A number of faculty engage in mentored research. Of particular note are the international programs engaging graduate and undergraduate students in research that positively impacts global health. Graduate students do not complete a thesis but self-select to engage in research.

Recruitment

For twenty years, Public Health has engaged in intentional efforts to identify and recruit diverse talent. They have been successful due to their efforts and also due to the fact a large number of their undergraduates are female. Students are mentored and encouraged to pursue graduate work and careers in academia. For example, the "department also conducts workshops on women in graduate school and in the workplace to encourage its female students" (Self-study, p. 58). They have developed and use a system to track potential faculty and are working to continue to develop a pool of highly qualified women, minorities, and men. The department should be commended for these recruitment efforts but may also consider how to increase racial diversity.

Department/Unit Processes and Procedures

The high level of collegiality is clear. Faculty feel supported and treated fairly. This is reflected across the board from hiring, to CFS, to teaching assignments and annual reviews. The department processes and procedures are well documented in great detail in the Self-study and raise almost no concerns.

STRENGTHS

- A high level of collegiality
- A strong and healthy culture of achievement and collaboration vs. competition
- Movement toward much greater gender diversity among faculty
- Innovative internship and international inspired learning opportunities
- Consistent engagement in scholarship among all faculty

CHALLENGES

• Replacing talented faculty lost to upper administration

FACILITIES AND RESOURCES

Facility Space, Usability, Appearance, Adequacy

Public Health is in a beautiful, well designed new building. Faculty have nice office space and conference rooms. Excellent lab space is available for research. In general, faculty and students seem pleased with the new building. The structure of some classrooms, however, is a bit of a concern. Public health classes that need non-lab classrooms find the fixed configurations in auditorium styled classrooms in the MARB and ESC (where they are assigned classrooms) are often inadequate for classes designed for didactic interaction or group work. The external reviewers suggest "more intensive advocacy and problem solving by several principals in the University. . .[which] should be a priority for the Chair" (External Review, p. 3). The chair reported making substantial efforts in this area but finding no accessible solutions unless faculty are

willing to take on different teaching schedules such as MWF, or F, rather than the current M/W, T/TH teaching schedule.

In terms of office space, movement from faculty to administrative positions has created sufficient space for the time being, but one or more offices will be needed as new hires are brought in to replace faculty lost to full time administration.

Our review indicated that access to lab equipment and amount of support staff to manage the labs and other resources are excellent. Funding is available to repair equipment and purchase new equipment.

Staff and Technical Support

The department has a total of five office staff: a full-time secretary; a budget analyst and assessment coordinator; a part-time internship coordinator and academic advisor; a part-time academic advisor; and an MPH Program manager. Two of these positions were created since the last unit review. Two to four part-time student secretaries are employed depending on department needs.

Some questions surfaced regarding the appropriate structure and level of support for advising and placement. A clearer strategy between the college and departments on how to most effectively advise and place students may prove helpful. The department currently has some talented team members supporting this area, but the advisor to student ratio was "shocking" (Low) to the external reviewers. They may consider providing these team members with a stronger voice in leading out in developing a clear strategy for long-term development of strong advising and placement, and possibly engaging students and alumni advisors in this process. The external reviewers suggest considering peer academic advisors as a potential way to increase support (External Review, p. 3). As indicated earlier, only 60% of employed undergraduate Public Health alumni say the department prepared them quite or extremely well in their current job. Unless some reasonable explanation for the phenomena is clear, this should be a major concern. Clearly, faculty should address this issue. One source of valuable information may come from support staff who interact with students at a much higher level than faculty in this area. The academic advisor, internship coordinator and MPH coordinator may be in a unique position to understand student needs and the job market. We recommend the faculty consider working to optimize the role and influence of these talented people, and work to listen with an open mind to their insights. Some data collected across the university suggest faculty may not appreciate, value, and engage staff in ways to optimize their roles. Increasing the percent of students who report being well prepared for their careers should be a priority.

Technical support for the Department of Public Health is provided at the college level and in general appears to be strong. Students did report frustration with slow programs (e.g., SAS) used for assignments and research. We did not determine if this can be addressed at the department or college level, or if it is an issue with the university servers.

STRENGTHS

- Beautiful new building
- Excellent support team
- University support for capital equipment for large equipment purchases

CHALLENGES

- Low academic advisor to student ratio
- Classroom design in some buildings outside the Life Sciences Building
- Limited faculty office space

SUMMARY AND CONCLUSION

Public Health is a strong department with engaged, happy and productive faculty and students. The mission and vision are aligned with the university mission and faculty are personally and collectively intentional in their commitment to continual improvement. The department responded fully to concerns raised in the last internal department review. They have successfully revised the undergraduate curriculum and obtained key accreditation. A number of other indicators suggest the department is strong and continuing on a positive path. Although we have recommendations for potential improvement, it is in the context of a vibrant culture and record of improvement. The department should be commended for their collegiality, great teaching, scholarly productivity and focus on student success.

RECOMMENDATIONS

- Assess and address perceptions from employed undergraduates that the degree did not prepare them for jobs
- Consider developing a long-term strategy to manage student demand in the context of potential expanding enrollment at BYU
- Explore ways to bring students in earlier, overcome the discovery major phenomena
 - Perhaps an online map of required classes and internships to help students plan efficiently to graduate quicker
- Continue to evaluate a mechanism to manage and reward faculty load across various responsibilities beyond teaching and research
- Strengthen new student research skills prior to course research projects in MPH
- Consider developing a strategy to build more robust advisement and career services
- Review ethics content across curriculum to ensure it is covered appropriately

External Report



Report from External Reviewers of Academic Units

Department of Public Health | Brigham Young University | Provo, Utah

External Reviewers: Amy Versnik Nowak & Stephen F. Gambescia

Review conducted: October 10-11, 2019 | Report submitted: October 25, 2019

Overview of Materials, Process, and Accommodations for Reviewers

We commend members of the Department of Public Health for putting together a robust selfstudy. The materials were comprehensive and orderly. The report read as a reflective piece, which is a major objective of a self-study. The materials were easy to read. Reports are presented in a professional manner, demonstrating pride in work review and outcome. Materials were sent in a timely manner for review.

The role and responsibilities as external reviewers were made clear to us. These were emphasized in writing and orally several times. It is clear that the Office of Planning and Assessment is confident about the process used in conducting academic unit reviews. There was no observed disconnect between this Office's staff members and any members of the Department of Public Health and, most importantly, the internal review team. When the review team asked for information, it was provided in an orderly and timely manner. All those interviewed felt comfortable participating in the process. There was a high sense of transparency among Department leaders. The review was conducted in an efficient manner, maximizing people's input and the review team's time. As external reviewers, we sensed a high regard for faith in the review process by members of the Department and BYU community.

The accommodations to make the trip and stay at BYU both comfortable and convenient was appreciated. It was always clear where we needed to be, when, with whom, and why. We suspect these temporal matters took much planning and communication. The overall environment of the BYU campus is remarkably healthy and positive.

Unit Progress and Plans

From the written report and interviews conducted by the Department leadership, it is evident that quality time was spent planning and reviewing progress. In responding to the major question: "What changes have taken place in the unit as a result of recommendations made from the previous report" (2013), authors provided detailed, reflective, and honest responses which helped us focus on strengths, considerations, and areas for improvement. Below are what we consider major areas for quality review and planning. These will likely be discussed in more detail in other sections of the report below, but we mention these here given the broad implications for program progress.

Student Enrollment

Goals and objectives for student enrollment in both degree programs was not evident. Reports were made in what program enrollments were going up or down but there was not a strong sense of thought into what programs you wish to grow, and why, or what programs you wish to have stay the same or set for planned obsolescence. Almost all universities and academic programs focus heavily on enrollment, especially with the overall decline of undergraduate enrollments across the country and now the dip in graduate studies. This may be explained by the delimited student population drawn from the Latter Day Saints congregation. However, there was a reference by the Dean of the College that "the President has set a goal of increasing enrollment by 10%."

Student Preparation for Workforce

In response to data indicating that only 60% of employed undergraduate Public Health alumni say BYU prepared them quite or extremely well in their current job is a concern. This should be explored further.

Time to Graduation

Time to graduation seemed very high. Strive for eight semesters–even with one semester for a mission/study abroad and regardless of transfer. Explore options for greater flexibility in curriculum. Examples include: flexible internship options (e.g., reduction in internship credits, internship as an elective, multiple internship opportunities, shadowing, ability to intern prior to coursework completion or while taking coursework); work with advising staff and student advisory team to explore blocks to timely graduation (e.g., prerequisites, course conflicts, not enough offerings); and explore/implement solutions (e.g., online offerings, hiring, use of graduate TAs).

Online Course Offerings

The report and interviewees mentioned the President's goal to have undergraduate students take at least 15 credits online before graduation. There was no evidence of the Department reviewing and planning for offering such courses. We recommend that while there is much information about best practices for delivering online courses and full programs, the department and all involved make sure it is well prepared to "do this well," as opposed to launching sub-optimal teaching/learning experiences.

Faculty Teaching Load

The report and interviews by the Chair noted the intention to move faculty from a 2-2-1 semester/summer teaching load to a reduced load. We make the observation that even a 2-2-1 load is very comparable, if not less, than most teaching loads at semester based universities. We understand the comparison may be clunky as the Public Health faculty have a high level of student engagement, including research and scholarly work, that other university faculty don't have. Also, comparing research intensive tenured faculty status (that requires faculty to bring in a robust amount of external funding) with BYU's CFS faculty status (with less external and high

2 of 8

internal funding) is not a fair comparison. However, the Department faculty have more students engaged in research and scholarship than a comparable "teaching faculty" status. It appears as if the CFS faculty are in between intensive research faculty and teaching faculty as observed at other universities. Therefore, how the faculty can reduce the teaching load and the department can cover course offerings will be a challenge for all; consideration will have to be given to both fiscal and teaching quality outcomes.

It is recommended that workload protocols be clarified. Coordinator responsibilities and workloads adjustments or compensation should be clear. Supervision of student teachers and mentored research are currently not calculated into faculty workload. Workload options used at other campuses should be explored. One option is offering a mentored research course with specific credits/workload (e.g., 3) and enrollment (e.g., determine # of students). Another option is to have workload calculated per student (e.g., .25 credits per student hour. Example: 1 student enrolls for 3 credits of mentored research = .75 workload for that supervising faculty member.)

Facilities

The College is situated in a remarkable building that is fresh, clean, and well maintained. The building, or at least the space allotted to this Department, appears to function more as a collection of good, well equipped laboratories. However, this is not such a good fit for most of the public health classes that need non-lab set-ups. Faculty may argue the best type of didactic or group work configuration for their class, but clearly the current set ups are not working. This calls for more intensive advocacy and problem solving by several principals in the University but should be a priority for the Chair.

Academic Advising

The academic advisors and internship coordinator are easily accessible to students, and faculty have an open door policy that also makes them accessible. Due to the large (and growing) undergraduate enrollment, reviewers are concerned that student advising is under resourced and that there seems to be a mismatch of staff/faculty/student expectations. We recommend a comprehensive review of how many full-time or part-time staff are needed to conduct quality student advising and where they are best located in the College space. Explore other advising models and consider the use of peer advisors. Consider additional investment in a full-time accreditation staff role that would work with administration, faculty, and advising staff on data collection, curriculum alignment, and other processes related to CEPH accreditation.

Vision/Priorities/Goals Statements

Revisit the vision, priorities, and goals statements to ensure they reflect the goals of the current faculty/staff/students. What makes the best stand-alone academic public health program in the world? Consider assessment of priorities. Examples: Are we enhancing teaching and learning? If so, how? Do students agree that they are prepared for graduate school and the workforce? (See *Student Preparation for Workforce* section on page 2.) For goals, what do we mean by state-of-the-art curriculum? How do we know if we have it? In future reports, address each goal. For example, the report did not address the mental health needs of students.

Academic Programs/Offerings

Faculty, student, and staff take pride in being a part of this Department. From the report, we get the sense that the Department offers "signature" type programs within the College and BYU. While changes continue to occur with the curriculum, the BS and MPH are mature programs at the University. The Department should be commended for gaining CEPH accreditation. Additional strengths of the programs include the desire to be state-of-the-art and innovative in curriculum offerings. The study abroad options seemed valued by both students and faculty.

Consideration can be given to "the right" specialty offerings in the BS degree. Evidence is that the environmental/occupational health enrollment has dropped, but it has the potential, given the faculty and lab space, to be a signature program. Some interviewees alluded to narrowing the specialties to three offerings, although others thought it was healthy to expand beyond the historical health promotion focus.

From the report, there is no *intense movement* for expanding or contracting program offerings. However, the report mentions consideration of a 4 plus 1 BS to MPH offering. We recommend this be given much thought. While these 4 plus 1 offerings have high level "marketing" and admission appeal, the offerings fly in the face of the public health field being an applied or professional field. To expand, maybe students should work in the field a couple of years before "going back" to graduate school. Naturally, this can be answered by surveying "where students go" after their BS and why.

With new curricular changes in the undergraduate Public Health degree and pending changes in the MPH degree, involve stakeholders in the post-change process as well. Regular check-ins with faculty, students, alumni, advisors, and employers/internship sites can help you gauge if the transition and/or changes are meeting expectations for all involved.

We ascribe to a philosophy that "curriculum belongs to the faculty," thus, we are conservative in making recommendations to the curriculum. We can say that getting the CEPH accreditation is a good marker that offerings are reasonable and responsible for the goals of both the BS and MPH programs. We do see a gap in not offering a *public health ethics* course in either the BS or MPH program. These courses have become more popular in the last 10 years. In looking at BYUs mission including "spiritually strengthening" and "character building" and the Department's mission and values to "build faith," and be a "community of lifters" and "scientists and faith," a course in ethics would go a long way to support this. We did get information that demonstrates how the faculty weave ethics through coursework, but think it useful to consider a required ethics course for both the undergraduate and graduate students. Similarly, in the undergraduate program it may be useful to consider some type of Philosophy of Science or Religion and Science course to support the values of scientists of faith. These may be offered at the university already.

The undergraduate program offers a course called "Influencing health through health systems and policy." The MPH program does not have a course, at least nominally, that addresses healthcare policy. Our sense is students get plenty of exposure to advocacy, but do they understand the structure, function, roles and responsibilities of several policy actors and have a command of the policymaking process at all levels of government? Consider the creation of a policy course, required or elective, at the MPH level. Consider requiring MPH students without a Public Health background to take the undergraduate policy course, or make the policy course available for both undergraduate and graduate credit. This approach might be prudent for an ethics course, as well.

The co-curricular activities are quite enriching for the public health students at BYU. They have ample opportunities for experiential learning, community engagement, research and scholarship that are not as robust in other programs throughout the country. Some of these are formal; others are informal and develop organically, which is healthy for meeting both faculty and student interests. The study abroad and global health opportunities seem well received and beneficial for both faculty and students. These, understandably, demand a lot of time for preparation.

In the undergraduate program, become more acutely aware of where students are going after graduation. (Refer to data point in *Student Preparation for Workforce* section on page 2.) In the health promotion specialty, it may be out into the workforce, not so much graduate school. Thus, students need to feel confident in their skills. Explore the possibility of a course in career exploration and job preparation. Also consider ways to clarify the skills that students learn in particular courses by providing more detailed course descriptions, clearly identifying public health skills learned in each class on syllabi (and a master list on your website or recruitment materials). In other words, tell students what skills they will have if they take this track vs. that track. This would be a great advising tool as well. Gather additional input from students, alumni, and employers about what skills are desired.

Graduate students have great opportunities for community involvement, leadership, and teamwork. For MPH students, there is a vast range for readiness for the research methods courses based upon their degrees and undergraduate experience prior to the MPH at BYU. As such, a short research primer experience prior to starting the program might be helpful. This could be done as an online module or two. On review of the MPH requirements, the current MPH appears to align with a MS or MA in Health Education. Perhaps rebrand that as such and then add an MPH that has more of a general focus. Explore research and non-research options for the graduate students. Include all stakeholders (students, academic advisors, and faculty) in these discussions.

Consideration should be given to how many resources go to the school health program. This could be something taken over by the school of education. Also, research other school health models that utilize the existing public health and education curriculum. Models exist in which only one unique school health course (e.g., school health methods) is required outside the already existing curricula. Consideration of a dual major with Physical Education can also be explored.

<u>Students</u>

The students at BYU are high quality students, all of whom have high GPAs and high test scores. This is unique and lends itself to the high level of involvement in mentored research projects at the undergraduate level. The students are both energetic and eager to learn.

Consider the development of Public Health Student Advisory Teams (one for undergraduate and one for graduate), which can be used regularly (e.g., monthly) to give feedback/input on curriculum, internships, etc. Include a faculty member, an advising team member, and other relevant faculty/staff in the discussions.

The graduation and alumni surveys are very helpful to understand the satisfaction, needs, and improvements to both programs. We recognize that surveying alumni is a challenge; you received a healthy number of responses to get the kind of feedback needed to make adjustments to the programs. Be sure to explore and address the data point in *Student Preparation for Workforce* section on page 2 (that only 60% of employed undergraduate Public Health alumni say BYU prepared them quite or extremely well in their current job).

Student engagement with faculty is exemplary. Meetings with students were valuable. While there is a range of views from students on how the program should run, generally they find the degree programs high in utility, challenging, and seem to understand the rationale for the curriculum and find the sequencing to be reasonable. Naturally, there are differences in the types of students in each of the four specialties, but they all seem to have a high regard for the field of public health.

Students expressed no concerns about advising, but in looking at the staffing and numbers it is worth considering the roles of staff and the number of staff needed to advise undergraduates and coordinate the graduate program.

The report showed a number of student outcome assessment activities, which is not easy to manage. It looks as if all are paying attention to student outcomes. The fact that the MPH students need to take the CPH exam is commendable. Passing rates are exemplary, even with small numbers taking the test. Number of students not passing CPH is negligible. CHES exam scores are well above the national average (20 pts or more). Passing rates is very strong at the high 80s to low 90s. Seem to be a slight dip in passing during the last two years. It is commendable that 50% funding is available to students for the CPH exam.

Plans for recruiting and monitoring a "discovery major" are not evident. Recommend looking closely at who is transferring in, from where, and why.

Faculty

The BYU Public Health Faculty strike us as an engaged, student-centered, research- and scholarship-minded group who find ways "to get things done." No major concerns were forthcoming from the extensive interview process conducted by the review team.

Faculty have a high level of respect and appreciation for the work of their Chair. Both leadership and administrative staff are considered highly positive, supportive, transparent, responsive, and accessible. Social events allow for CFS faculty, adjunct faculty, and staff to be engaged with each other. With a large department, explore ways to ensure that all voices are being equally valued/respected and given adequate time to be heard in committee, department, mentoring, and other meetings.

Faculty have a unique sense of focus on their research and scholarship but give plenty of quality time to teaching and student engagement. Faculty may want to consider more team teaching which is enriching and helps improve teaching for all.

Faculty productivity in scholarship is respectable. They seem to find the areas of study, time, and collaborators with whom to work. Faculty are leaders in their fields and professional associations. Requirements for status and rank are clear and understood. With the change in CFS documentation, ensure that expectations for documentation are clear. A mentoring program is in place to assist faculty in promotion. The process of review at the University is rigorous. Gaining CFS is an accomplishment.

There is a well-rounded consideration to the major areas of a faculty member's time, i.e., teaching, research, and service. It was not as evident the level of "practice" to which they engage. This could be meaningful to ensure, with some faculty, given their areas of interest.

Several faculty were solicited to join university administration. This caused some cascading among assignments. Plans to hire new faculty to fill these positions were implemented.

There is a healthy balance of new and seasoned faculty; while some groups form for support and interests, all seem open to collaboration. Gender diversity is stronger in this department compared with the university as a whole. Other areas of diversity are not as evident given the mission of a Latter Day Saints university reaching a delimited group of students.

Consider some assessment regarding the entire BYU experience (from hiring to retirement) for CFS faculty, adjunct faculty, staff, and student employees to ensure their needs are being met and to explore how to enhance the experience for all parties. This may include the hiring process, onboarding, contract renewals, communication of responsibilities, development of teaching skills, access to resources, CFS and adjunct review processes, CFS documentation, mentorship, engagement and knowledge about the curriculum, etc. Include all stakeholders in the process.

Facilities and Resources

BYU has a beautiful campus. The grounds and buildings that we saw are well-maintained. Students moved around campus with a healthy collegial look. The College is situated in a remarkable building that is fresh, clean, and well maintained. The lab, offices, and other spaces were in great condition. The repurposing of the one lab space into two offices is an efficient and creative solution for needed office space.

The space allotted to this Department functions more as a collection of laboratories; but not such a good fit for most of the public health classes that need non-lab set-ups. The looks to be a need for advocacy and problem solving by several principals in the University (Registrar, Dean, Chair) to establish appropriate teaching space for faculty. This includes uncrowded classroom space that allows for small group work, access to sinks or other features required for equipment, and seeking out additional solutions for future office space as the department continues to grow.

Short-term and long-term solutions for technology and server issues should be handled in a timely fashion. Slow servers and/or internet connections create frustration and inefficiencies in the learning and/or research process. This issue appears to be at the University level, so administrative action is required for both seeking and implementing long-term solutions. If College or Departmental action can help in the short-term, this is recommended.

Training is available to faculty/staff regarding QPR, CTL, Title 9, implicit bias, FERPA, HIPPA, etc.

Faculty did not voice any major resource issues. In fact, the level of university funding for faculty and students is very uncommon. We commend the university on the amount of funds provided for student/faculty travel for presentations, CPH exams, undergraduate and graduate salaries, scholarships, grant monies, etc. Given the funding system of BYU's sponsor, we are hesitant to conjecture any recommendations for resources.

#

Self-study Report

Self-study Report



Public Health

ACADEMIC UNIT REVIEW SELF-STUDY REPORT

October 2019



OFFICE OF PLANNING & ASSESSMENT

BYU Public Health

2019 Self Study



Brigham Young University - Department of Public Health

Website: PH.BYU.EDU

Tel: 801-422-3386 Brigham Young University, 4103 LSB, Provo, UT 84602

TABLE OF CONTENTS

INTRODUCTION	1
UNIT PROGRESS AND PLANS	2
CHANGES	2
Mission and Aims	
5-7 Year Plan	
Outside Influences	
OTHER POTENTIAL ISSUES	
A. GENERAL PROGRAM INFORMATION	
New Programs	
Faculty Mentoring	
Inspiring Learning	
Continuing Education	
Service Courses	
B. REVIEW OF EACH PROGRAM	
1. BS in Public Health – Core Curriculum	
Learning Outcome Updates	
System for Assessment of Learning Outcomes	
Improvements Potential Issues	
Potential issues Trends	
Campus Connections	_
Student Satisfaction	
Demographic Trends	
Other Issues	
2. BS in Public Health – Health Promotion Emphasis	
Learning Outcome Updates	
System for Assessment of Learning Outcomes	
Improvements	
Potential Issues	
Trends	
Student Satisfaction	
Demographic Trends	
Other Issues	
3. BS in Public Health – Epidemiology Emphasis	
Learning Outcome Updates	
System for Assessment of Learning Outcomes	
Improvements	
Potential Issues	
Trends	
Campus Connections	
Demographic Trends	
Other Issues	
4. BS in Public Health – Environmental/Occupational Health Emphasis	
Learning Outcome Updates	
System for Assessment of Learning Outcomes	
Improvements	
Potential Issues	
Trends	
Student Satisfaction	
Demographic Trends	

BYU DEPARTMENT OF PUBLIC HEALTH – UNIT REVIEW 2019

	her Issues	
5. BS i	in Public Health – Health Science Emphasis	
	arning Outcome Updates	
Sys	stem for Assessment of Learning Outcomes	
Imp	provements	
Pot	tential Issues	
Tre	ends	
Stu	udent Satisfaction	
Der	emographic Trends	
	her Issues	_
6. Ma	asters of Public Health (MPH)	
	arning Outcome Updates	
Sys	stem for Assessment of Learning Outcomes	
	provements	
Pot	tential Issues	51
-	ends	
	udent Satisfaction	
	emographic Trends	
	udent Demand	
Otł	her Issues	53
FACULTY		54
MAKE-UP	AND RESOURCES	54
Strength	HS AND CHALLENGES	55
PERFORMA	IANCE EXPECTATIONS AND EVALUATIONS	57
FIVE-TO-S	Seven Year Staffing Plans	
DECISIONS	S	
	SUES	
ADEQUAC	CY OF RESOURCES	61
UNIVERSIT	TY SUPPORT	61
STAFF AND	d Technical Support	62
ADEQUAC	CY OF SPACE	63
-	NT	
-		
155015		

Figures

FIGURE 1: CORE VALUES	14
FIGURE 2: STUDENT PARTICIPATION IN MENTORED RESEARCH	18
FIGURE 3: STUDENT CO-AUTHORED PAPERS AND PRESENTATIONS 2014-2019	19
FIGURE 4: GLOBAL HEALTH INTERNSHIP PROGRAM LOCATIONS SINCE 2014	24
FIGURE 5: EVENING COURSES OFFERED BY SEMESTER/TERM 2013-2019	
FIGURE 6: HEALTH PROMOTION EMPHASIS ENROLLMENT, 2013-2019	
FIGURE 7: EPIDEMIOLOGY EMPHASIS ENROLLMENT, 2013-2019	40
FIGURE 8: ENVIRONMENTAL/OCCUPATIONAL HEALTH EMPHASIS ENROLLMENT, 2013-2019.	43
FIGURE 9: HEALTH SCIENCE EMPHASIS ENROLLMENT, 2013-2019	47
FIGURE 10: MPH LEARNING OUTCOMES ASSESSMENT SYSTEM	50

Tables

TABLE 1: DEPARTMENT OF PUBLIC HEALTH RESEARCH LABS	18
TABLE 2: STUDENT CO-AUTHORS FOR PAPERS AND PRESENTATIONS 2014-2019	19
TABLE 3: STUDENTS PARTICIPATING IN MENTORED RESEARCH, 2014-2018	20
TABLE 4. EUROPE PUBLIC HEALTH STUDY ABROAD	
TABLE 5: GLOBAL HEALTH INTERNSHIP PROGRAMS AND PARTICIPATION	24
TABLE 6: PUBLIC HEALTH CORE CURRICULUM CHANGES 2018	

Appendices

Appendix 1: Mission Statement Appendix 2: Aims and Goals Appendix 3: Strategic Plan Appendix 4: Direct Student Learning Summary Appendix 5: Student Co-Author and Co-Presenters Appendix 6: Experiential Learning Appendix 7: Enrollments in General Education and Selected Service Courses Appendix 8: Curriculum Map Appendix 9: MPH Curriculum Appendix 10: Core Alignment Table Appendix 11: Undergraduate Degrees Awarded, by emphasis Appendix 12: Undergraduate Course Enrollments, by emphasis Appendix 13: Senior Survey Data Appendix 14: Alumni Questionnaire Data Undergraduate Appendix 15: Student Demographics of Enrolled Majors Appendix 16: Health Promotion Alignment Table Appendix 17: Senior Survey Data Health Promotion Appendix 18: Alumni Questionnaire Data Health Promotion Appendix 19: Epidemiology Alignment Table Appendix 20: Senior Survey Data Epidemiology Appendix 21: Alumni Questionnaire Data Epidemiology Appendix 22: Environmental/Occupational Health Alignment Table Appendix 23: Senior Survey Data Environmental/Occupational Health Appendix 24: Alumni Questionnaire Data Environmental/Occupational Health Appendix 25: Health Science Alignment Table Appendix 26: Senior Survey Data Health Science Appendix 27: Alumni Questionnaire Data Health Science Appendix 28: Master of Public Health Alignment Table Appendix 29: Graduate Degrees Awarded Appendix 30: Enrolled and Matriculated Graduate Students Appendix 31: Exit Survey Master of Public Health Appendix 32: Alumni Questionnaire Data Master of Public Health Appendix 33: Faculty Rank and Experience Profile Appendix 34: Course Sections Taught Appendix 35: Student and Course Credit Hours Per Full-Time Faculty Member

Appendix 36: Faculty Performance Indicators

The Department of Public Health commenced work on the 2019 Unit Review during January 2019. All faculty and staff were engaged in the process. Individuals were assigned to four teams by the department chair (Hanson) and aligned with the major sections of the self-study (unit progress and plans; programs; faculty; and facilities and resources). Teams were constituted as follows:

I. Unit Progress and Plans Len Novilla (Lead) Randy Page • Ray Merrill Jeff Glenn Carl Hanson • **II.** Programs Steve Thygerson (Lead) • Evan Thacker ٠ Brianna Magnusson • Josh West • Ben Crookston • Stephanie Lutz • III. Faculty Chantel Sloan (Lead) • Lori Spruance • Ali Crandall • Cougar Hall Alisha Redelfs • IV. Facilities and Resources Jim Johnston (Lead) • **Emily Eyre** •

Throughout the self-study process, teams worked collaboratively and independently to complete sections of the study. The department chair monitored the progress with assistance from Departmental Administrative Assistant, Tanya Gale. Tanya Gale was also instrumental in managing the teams' progress using an online collaborative workspace (i.e., https://trello.com) as well as performing important editing and formatting functions. All faculty reviewed the final draft of the self-study.

The department offers the Bachelor of Science (BS) in Public Health with four emphasis areas: (1) Environmental/Occupational Health, (2) Epidemiology, (3) Health Promotion, and (4) Health Science. The department also offers a Master of Public Health (MPH) degree and a Minor in School Health. Of the 181 bachelor's degree programs at BYU, the BS in Public Health program is currently the 10th largest major on campus. Additionally, of the 177 accredited schools and programs of public health, the MPH program was ranked 89th nationally in US News and World Report 2020 rankings. Both the graduate and undergraduate programs are accredited by the Council on Education for Public Health (CEPH).

- John Beard •
- **Robbie Chaney** •

Changes

What changes have taken place in the unit as a result of recommendations made in the previous unit review report?

Recommendations made in the last unit review are presented in italics followed by the department's response.

Allocate more help for student advisement on internships, graduate programs, and career possibilities. Consider more effectively utilizing the college advisement center to help with this situation.

The department has implemented measures to address student advising on academic plans, internships, and career planning. The department continues to work closely with Life Sciences Advising. The department advisor (Liechty) and internship coordinator (Lutz) regularly attend the college advisement meetings to remain abreast and responsive to the advising needs of public health students.

Student Advising and Career Possibilities

- Advising is handled by staff in the department and in Life Sciences Advising. Since the last unit review in 2012, the department hired Beth Liechty as a half-time student advisor. Beth advises students on initial class planning, recommends course substitutions, and helps with career planning when needed. She is a graduate of the public health program. Marcia Richards, a fulltime staff member in Life Sciences Advisement has been assigned to advise public health students on class planning. Up to one-third of Marcia's time is dedicated to advising public health students.
- Len Novilla, associate chair, reviews and approves course substitutions.
- Lisa Christensen, formerly from the BYU Career Services, has previously headed the Career Planning for the Life Sciences Advising. She has presented in our department faculty meetings and fall retreat on various strategies for helping our public health students expand their professional network and prepare for their future careers by actively participating in university-sponsored Career Fairs, STEM Career Fairs, and Summer Job Fairs. These events are held throughout the year and involve recruiters from various companies, organizations, and agencies in the United States.
- Lori Spruance, Public Health faculty, heads the BYU Public Health Association (BPHA) and the department's Annual Alumni Networking Event, both of which are in line with the department's career and professional networking goals. These provide our public health students the chance to get together, to learn about job opportunities, and to expand their professional network by meeting the department's alumni and other public health professionals and practitioners in Utah.

Student Advising on Undergraduate Internships

• At the undergraduate level, Stephanie Lutz, who has been assisting with advising, has been transitioned to a three-quarter-time position as the department Internship Coordinator. Also, beginning February 2019, Evan Thacker (Health Science emphasis coordinator) has reviewed/approved internship site pre-approvals for Health Science student internship proposals, taking that task off of Stephanie's plate. (24 proposals so far).

Graduate Program

• The department has hired Ruth Riggs in 2015 as a half-time MPH program manager. Ruth assists with graduate program responsibilities, CEPH accreditation review, and graduate student advising needs. She guides the students in the completion of various forms necessary for their program of study, progress report, fieldwork, and graduation.

• The graduate faculty in the department advise our MPH students. Faculty conduct one-on-one consultations on potential fieldwork projects, supervise the actual fieldwork, and/or involve interested students in their research.

Life Sciences Advisement

- Life Sciences Advisement continues to assist our department in undergraduate advising and registration, major academic planning, change of major, substitutions, and in handling student transfers.
- Marcia Richards from Life Sciences Advisement continue to help Beth Liechty in advising our public health students on choosing a major according to their academic interests; planning classes toward timely graduation; preparing for future careers, and in handling transfer students.

Address the problems caused by high enrollment in the Public Health major.

Brigham Young University is a privately-owned and funded university whose students come from all over the world. It offers high quality yet cost-effective education that is appealing to many students. Although other academic institutions of higher education across the country are experiencing a decline in student enrollment, BYU continues to see enrollment growth. The academic emphases offered by the Department of Public Health are among the popular majors on campus.

The department has worked diligently to address this issue by reducing class sizes, reviewing course sequencing and prerequisites, hiring teaching assistants, offering additional sections to more evenly spread out enrollment, acquiring additional faculty lines, and exploring online and hybrid courses.

The department has implemented and/or explored the following measures to varying degrees to address enrollment size without compromising the quality of teaching and learning:

- <u>Establishing an optimum class size per course</u>. The core public health courses have been capped at 60. Emphasis-specific courses are capped at 30 and prioritized or restricted to majors only. Caps have been in place since 2014.
- <u>Offering two sections of core courses each semester</u>. Two sections of each public health core course have been added both fall and winter semester.
- <u>Reviewing course sequencing and prerequisites</u>. After the revamp of the undergraduate curriculum, the department's present Curriculum Committee regularly reviews the sequencing and prerequisites to all public health courses and recommends revisions as necessary. Such efforts are intended to facilitate optimum class sizes and timely graduation.
- <u>Effectively using teaching assistants</u>. Faculty are given the discretion to hire teaching assistants to assist in grading and teaching in their respective courses. Each faculty member is given the discretion to hire teaching assistants on an as needed basis. In situations where more teaching assistants are needed during a given semester, the instructor works with the department chair to garner additional resources. For example, request have been made to increase the number of teaching assistants for HLTH 210 to accommodate higher enrollment in that course.
- <u>Hiring more professors</u>. Since the last Unit Review in 2012, the department has hired seven additional fulltime faculty, which increased the total number of full-time faculty members to 20. Where gaps in teaching occur, as in the classes previously taught by faculty members who now serve in college and university administrative positions, the department chair has the managerial latitude to hire adjunct faculty to teach their classes. It is important to note that three of the department's full-time faculty members are currently serving

college and university administrative positions (Neiger, Thackeray, Barnes). The department has been granted permission to hire a replacement for two of these faculty members (Neiger, Thackeray).

• Exploring and offering online and hybrid models. The department has recently initiated the discussion on offering additional online and/or hybrid classes to address enrollment size. HLTH 335 was successful piloted as an online course for several semester and continues to be offered. This effort aligns with the 2017 call of President Worthen to "... expand the number of online offerings available to our matriculated students so that by 2020, each BYU student will be able to take at least fifteen hours of credit online before graduation."

Consider the options to address the understaffed School Health Education major.

In 2013, the department discontinued the School Health Education major but retained the School Health Education Minor. Dr. Cougar Hall has assisted with this transition by advising school health education students when necessary and overseeing student teaching of the remaining majors.

Conduct faculty discussion on the role that global health should play in the department programs and research agendas of the faculty, and based on these discussions make necessary changes.

Global health is population health beyond borders. It is defined as "the area of study, research and practice that places a priority on improving health and achieving equity in health for all people worldwide" (Koplan JP, Bond TC, Merson MH, et al. "Towards a common definition of global health". *Lancet*. 2009, 373(9679):1993–5). Individual faculty members, with interest in global health, continue to conduct studies in this area. They have also headed global health and healthcare internships in various countries to provide experiential learning opportunities for public health students on health issues of global impact.

In 2013, the department moved away from emphasizing global health as a program focus. Instead, it moved towards health promotion at all levels---local, state, national, and global. This was in response to the changing social, political, and economic landscape in the world. For instance, the world-wide economic recession has limited job opportunities in international and global settings. Terrorism continues to pose travel safety and security issues for students. Nonetheless, the department understands that the major health issues in the 20th century, such as chronic diseases and their resulting disabilities; growing antimicrobial resistance; emergence of new diseases; and the re-emergence of previously-controlled or eradicated infectious diseases---can all be traced back to inequities in health that result from the social determinants of health. Such health issues remain borderless and global. Thus, it is possible that a programmatic focus on global health will again be revisited by the department in the near future.

To date, the department has approached global health by:

- Encouraging faculty members, who are interested in global health, to continue to pursue research in global health;
- Expanding its global health experiential learning programs with the help and support of the BYU David M. Kennedy Center. These include the Global Health Internships, Nepal Internship Program, and the Europe Study Abroad Program; and
- Offering a Global Health Certificate program in 2016 for interested MPH students. To date, two students a year take advantage of the certificate.

Explore ways to resolve the load faculty members experience caused by large class sizes in the BS Public Health major.

As noted above, larger sections of core public health courses are capped at 60 except for HLTH 210 Foundations of Public Health, which is capped at 160. Emphasis-specific courses are capped at 30. Also, additional sections of high demand courses are offered to allow for small class sizes, while still accommodating the demand for these courses. For example, at least two sections of each major specific course (e.g., HLTH 431, HLTH 434, and HLTH 439) in the health promotion emphasis are offered each semester in order to meet the demand. During 2018—2019 the Undergraduate Curriculum and Learning Committee reviewed and adjusted pre-requisites in several courses such as HLTH 313, HLTH 345, and HLTH 440, in order to reduce bottlenecks.

The department chair has given individual faculty members the discretion to hire teaching assistants to help with the grading and teaching in their respective courses. For instance, a big class can be broken down into review or study groups, which the TAs can be made in-charge to help answer student questions, discuss key concepts, and to promote student-to-student communication and interaction.

Faculty course loads have also been manipulated in order to maximize efficiencies. For example, it was observed that one faculty member was teaching a spring course that had lower enrollment (HLTH 345). This course was dropped as a spring course and added as an additional section of the course during fall. This change helped reduce over enrollment in both fall sections of HLTH 345. Several faculty (e.g., Merrill, Thacker, Sloan) have agreed to a 3:2 or 2:3 teaching load which allows for additional sections of courses that are in higher demand during fall and winter semesters.

The department has recently initiated a discussion about offering additional online and/or hybrid classes. This discussion has been motivated by the need to address enrollment size and in response to President Worthen's call on spreading the spirit of the Y to as many students as possible through online classes. The challenge of large classes can also be made manageable through active teaching styles that emphasize small group discussions, peer work and collaboration, and the use of small groups to complete in-class assignments. However, the physical design of the classrooms typically assigned to the department (MARB and ESC) makes small group work challenging.

Review teaching loads, particularly of CFS-track faculty, and consider course relief in spring/summer to aid assistant professors through their third-year and final CFS reviews.

The typical faculty load for CFS faculty in the department is five courses a year or a 2:2:1 model. In this model, an individual faculty member teaches two courses each in the fall and winter semesters, and one course in the spring/summer term. The department has approved a policy allowing first-year CFS faculty to follow a 1:1 model in which they teach only one course in the fall and winter semesters while second-year faculty teach a full complement of five courses a year. The department chair tries when possible to limit first year faculty to only one course preparation during the first year.

Consider ways to make sure all pre- CFS faculty members are well-mentored.

The department chair ensures that each pre-CFS faculty member is assigned a mentor. These assignments are updated annually in the Department Assignments document, which is distributed during the annual fall department retreat. All new or pre-CFS faculty are paired with a more senior member of the faculty, who serves

as the mentoring chair. Typically, the senior, mentoring faculty is from the same emphasis area as the new/pre-CFS faculty member. The faculty mentor: (1) stays in regular contact with the faculty member and nurtures a professional relationship; (2) discusses annual progress towards rank and status; (3) assists with various questions, needs, and/or concerns relative to rank and status; and (4) serves as a coach, friend, advocate, role model, and as a teaching/research resource based on the professional needs of the pre-CFS faculty member. This mentor-mentee pairing provides pre-CFS faculty members a support network for navigating and successfully completing their third and sixth-year reviews.

The department chair conducts yearly stewardship interviews with each faculty member, including pre-CFS faculty, to obtain feedback on performance, discuss issues in the department and potential solutions, and to determine faculty teaching, research, mentoring and/or equipment needs.

Counsel with faculty members regarding personal development leaves.

When appropriate, the department chair visits with faculty regarding personal development leaves. The Annual Stewardship Interview provides another mechanism through which the department chair is able to visit with faculty members to obtain their feedback on department issues and recommended solutions; discuss the need for a personal development leave; and to determine their teaching, research, mentoring, and/or equipment needs. Prior to these interviews, the department chair distributes a list of questions that will be discussed during the stewardship interview. Faculty members are encouraged to answer these questions prior to their respective stewardship interview. They are also given the opportunity to discuss issues and needs that may not be covered by these interview questions.

Encourage faculty members to seek external funding.

In 2017, the public health faculty discussed the need to increase external funding applications and awards within the department. As a result of these discussions, the faculty voted to amend the department's rank and status document to include expectations for external funding (see Unit Rank and Status Document). Specifically, all pre-CFS faculty are required to submit a least one funding application to an external agency in the probationary period, prior to the sixth-year review. Additionally, all CFS faculty pursuing rank advancement are required to submit at least two funding applications after receiving CFS to qualify for advancement to Professor.

Develop the role of global health in the undergraduate and graduate programs with careful consideration of maximizing student expertise to benefit the program and faculty members research opportunities.

As previously stated, individual faculty members, with interest in global health, continue to conduct studies in global health. They also lead global health and healthcare internships in various countries to provide experiential learning opportunities for students on health issues of global impact. In 2013 however, the department decided to move away from emphasizing global health as a program focus. Instead, it moved towards health promotion at all levels---local, state, national, and global. This was in response to the changing social, political, and economic landscape in the world. For instance, the world-wide economic recession has reduced job opportunities in international and global settings. Terrorism continues to pose travel safety and security issues for students. Nonetheless, the department understands that the major health issues in the 20th century, such as chronic diseases and their resulting disabilities, antimicrobial resistance, the emergence of new diseases, and the re-emergence of previously-controlled or eradicated infectious diseases---can all be traced back to inequities in health that result

from the social determinants of health. Such health issues remain borderless and global. Thus, it is possible that a programmatic focus on global health will again be revisited by the department in the near future.

Beyond the encouragement of faculty research in global health and offering the Global Health Certificate to interested MPH students, the department has approached global health by expanding its global health experiential learning programs with the help and support of the BYU David M. Kennedy Center. These programs include:

- <u>Global Health Internship Program</u>. This program was started in 2014 and is headed by Dr. Randy Page. The Global Health Internship Program aims to provide BYU students with a reflective and transformative global health and/or international development experience through field opportunities in public health and healthcare systems in 13 different countries in Africa, Asia, North and South America, and Europe. Students are exposed to actual public health work, clinical practices, service learning, social services, and other educational experiences in various countries through which BYU students learn and understand the role of local and national social determinants in shaping a country's culture and social capital. The program started with 15 students who participated in two programs in two countries. By 2019, the program has 14 programs in 13 countries with more than 100 student participants.
- <u>Nepal Internship Program</u>. This program was started in 2018 and is headed by Drs. Thygerson and Johnston. The program started with six undergraduate students and two graduate students in 2018. In 2019, seven undergraduate students and two graduate students participated in this program in Nepal. BYU students assist the National Institute of Occupational Health and Safety in Nepal in recognizing and evaluating occupational health hazards in the Nepal brick kilns. The students conduct ergonomic and heat stress evaluations and silica air sampling using cutting-edge technology. The David M. Kennedy Center provided a \$5,000 research grant for the global health internship in Nepal.
- <u>Europe Study Abroad Program</u>. This program was started in 2016 and is headed by Drs. Crookston, Hall, and West. The program holds classes, exposes students to some of Europe's most healthy environments and people, provides students with opportunities to visit the World Health Organization, meet local public health officials that include city planners who are working to improve infrastructure for bike commuters, and to strengthen connections with faculty mentors and other participating students. When the program started in 2016, 39 students participated and visited five countries. In 2019, 41 students participated and visited eight countries.

Pursue regular communication between faculty members and part-time faculty members who teach the same classes on expectation for course content and requirements as well as suggestions for improvement.

The primary mechanism for ensuring consistency in course content takes place during the hiring process of parttime faculty. As the department chair hires a part-time faculty member to fill a teaching need, he connects the adjunct faculty with the full-time faculty who is teaching the same course. This process aims to facilitate regular consultations and discussions on teaching, course content, assessments, and students' needs. The department chair also reviews the student ratings of all part-time faculty and communicates regularly with during the semester/term. Communications typically include course expectations, recommendations for improvement, and encouragement.

Faculty members who teach the same or related courses are encouraged to meet regularly to discuss the strengths of their courses and to identify areas of improvement. For example, faculty members who teach the new core courses HLTH 314 (Novilla and Thacker) and HLTH 315 (Johnston and Sloan), meet during and after the semester to discuss course design, content, assessments, and course delivery. They then retain or revise content and assessments based on their discussions.

Continue to develop a diverse pool of potential faculty members. The external reviewers suggest conducting a faculty search seminar series in which potential candidates are invited as guest speakers. Consider cultivating relations through professional conferences, and tracking former students through graduate programs.

Since the last review, the department has developed and maintained a <u>Google tracker</u> document entitled "Potential Faculty Applicant Pool". All faculty in the department have access to the document and the department chair encourages faculty to update content as information is learned. This document has guided the last seven successful faculty searches. It is comprised of the names, contact information, academic degrees, titles, and employment positions of the department's alumni who are working towards their Ph.D. or have already received it. This document also includes the names of other professionals that the department faculty know or have met in professional conferences or meetings. All department faculty have access to this spreadsheet and are encouraged to add additional contacts. All faculty are reminded to update this list regularly.

Since 2016, the department has held its Annual Alumni Networking Event to provide our undergraduate and graduate students the opportunity to meet and visit with the department's alumni and other public health professionals and practitioners. These alumni events also benefit our department. Several alumni who have participated in this annual event have a terminal degree. With their permission, the department has added their contact information in the potential applicant pool document. The 2019 event involved approximately 30 alumni who are currently working in the field of public and 70 public health students.

Since the last Unit Review, the department has held a seminar series for its students and the community. Headed by Chaney and Sloan in 2015, guest speakers were invited from local and national public health professional communities. The department aims to make these efforts consistent and sustainable by exploring the possibility of having each academic emphasis in the department take turns in leading the seminar series every fall and winter semesters. In addition, the department has reconstituted the Professional Development Committee for the 2019—2020 academic year. The primary charge to this committee will be to (1) ensure the periodic assessment of professional development needs of individuals currently serving public health functions in our self-defined priority community or communities, (2) ensure the delivery of professional development opportunities for the workforce, and (3) oversee the process and selection of seminar presenters.

The department continues to expand its efforts in nurturing a life-long connection and relationship with its alumni. The department formed the ad hoc Alumni Connections Committee last Fall 2018, which is chaired by Dr. Jim Johnston. The committee continues to explore effective practices for connecting and engaging the department's alumni. The primary recommendation from the work of the committee last year was to develop programming that addresses a need our alumni might have. In other words, rather than "what can our alumni do for us," consider the question "what can we do for our alumni?" Recommendations have included annual recreational events among faculty and alumni as well as continuing education activities.

Explore ways to make faculty meetings more efficient and action-oriented.

Faculty meetings are held when there are items worth discussing or sharing that impact the whole department. The department secretary prepares and distributes a standing schedule of bi-monthly meetings during the fall and winter semesters.

The purpose of the majority of department meetings are established prior to the beginning of each academic year. The department chair in concert with the department secretary prepares the academic year department calendar noting important events as well as department meetings and their purpose. Prior to department meetings, the department chair distributes by e-mail the meeting agenda. Each agenda item is classified as "inform," "discuss," and/or "act." The names of the designated discussion leaders are placed opposite each agenda item. They lead the discussion of a particular issue during the meeting. The discussion leader and the department chair work to move faculty members toward consensus on action items. Evidence of this process and outcomes is archived in department meeting minutes and is available upon request. In addition, the chairs of the department's ad hoc committees provide updates on the progress of their work.

Every Monday, the office staff (Gale) disseminates weekly email updates on major agenda items classified as "inform" to ensure that the faculty meeting time is focused on the discussion and resolution of said issues.

The department should continue efforts to deal with burgeoning undergraduate enrollment by seeking increased resources, but also explore other avenues, such as online courses, course prerequisites, or majors-only classes to reduce class sizes.

During the last unit review, the total number of faculty FTE allocated to the department was 18. During the hiring freeze, the number of full-time faculty in the department was reduced to 15. In recent years, the department has been awarded two additional faculty lines beyond the original 18. One line was considered a BHAG (university allotted position) and one was a reallocation of FTE within the College of Life Sciences. In total, the department has hired a number of additional full-time faculty since the hiring freeze bringing the total number of full-time faculty members in the department to 20.

Additional efforts to deal with the growing undergraduate enrollment have already been discussed above and include establishing an optimum class size per course; offering online and hybrid model; reviewing course sequencing and prerequisites; effectively using teaching assistants.

Explore suggested options for the School Health Education (SHE) major (1) hire another faculty member in the school health area, (2) merge SHE into a new emphasis area of Adolescent and School Health, and (3) consolidate SHE with Physical Education in the McKay School).

In 2013, the department decided to discontinue its School Health Education major but retained its School Health Education Minor with Dr. Cougar Hall as the program coordinator. The primary rationale for this change included the reduction in the demand for school health education teachers state-wide and nationally due to changes in governmental policies associated with school health education. At the same time, public health education (beyond schools) was attracting interest of students and programming was growing exponentially at universities across the country. This growth has been attributed to initial support provided by the Association of American Colleges and Universities (AACU) and the Association of Schools of Public Health who recommended a series of public health courses be included as a part of general education and important for all educated citizens (Riegelman, R.K., Albertine, S., and Wykoff, R. A. "A history of undergraduate education for public health: From behind the scenes to centers stage. *Frontiers in Public Health*. 2015. 3:70).

Explore the external reviewers' proposal of merging the Health Science and Epidemiology emphases into one emphasis.

The department underwent a major undergraduate curriculum revision during 2016-2017. At that time, faculty in the department revisited the possibility of deleting the Health Science emphasis. This matter was put to a faculty discussion and vote. A majority of the faculty felt that it was important to retain the Health Science emphasis. The department realigned select faculty with the emphasis such as Dr. Randy Page, Dr. Len Novilla, Dr. Jeff Glenn, and Dr. Evan Thacker, who currently serves as the emphasis coordinator. Following the decision to retain the emphasis, two courses specific to the emphasis were developed - HLTH 423: Integrating Public Health and Primary Care and HLTH 425: Working with Vulnerable and Diverse Populations.

More of the student advisement load could be taken by the College Advisement Center. The department should consider hiring other personnel to take some of this load.

The department has made two hires since the last Unit Review to address student advising and MPH Program needs and has transitioned Stephanie Lutz to a three-quarter-time internship coordinator. In 2013, Beth Liechty was hired as a half-time undergraduate student advisor. Beth advises students, recommends course substitutions, and helps with career planning. Life Sciences Advisement continues to assist the department in undergraduate advising and registration, major academic planning, change of major, substitutions, and in handling student transfers. Farris Child and Marcia Richards from the Life Sciences Advisement assists Beth Liechty in advising of public health students by helping students choose a major according to their academic interests; planning classes toward timely graduation; preparing for future careers, and in handling transfer students. Len Novilla, associate chair, reviews and approves course substitutions.

At the graduate level, the department has hired Ruth Riggs in 2015, as a half-time MPH Program Manager. Ruth assists with graduate program responsibilities, CEPH accreditation review, and graduate student advising needs. She guides the students in the completion of various forms necessary for their program of study, fieldwork, and graduation. At the graduate level, the faculty have primary responsibility for student advising. Each graduate student is assigned a faculty advisor, who also oversees the student's fieldwork project. Faculty members in the department help in advising our MPH students. Faculty conduct one-on-one consultations on potential fieldwork projects, supervise the actual fieldwork, and/or involve interested students in their research.

Student advisement should focus more on providing information about employment and salary outlook. An update to the web site could facilitate this goal. The department should gather more data to find out why many alumni are not happy with their career choice. In addition, the department or the student club could provide and/or promote opportunities for students to network professionally, e.g., by organizing student attendance at state conventions for public health professionals.

The department has taken measures to provide updated information on job opportunities in public health and related disciplines.

- <u>Job Board</u>. The department has developed and has maintained a job board through which students can browse employment opportunities. See <u>https://ph.byu.edu/alumni-careers</u>.
- <u>Newsletters</u>. Beth Liechty sends out weekly electronic newsletters (BYU Department of Public Health Newsletter) to all undergraduate and graduate students in public health. This newsletter contains announcements on upcoming department and college events including college lectures; information on advising, volunteer, internship, and employment opportunities; BYU Public Health Association (BPHA) news; and MPH announcements and information.

• <u>Department Website</u>. The department has developed and maintained a website containing information on the department's core courses, four academic emphases, and the Minor in Gerontology. It also highlights the information about BPHA and its networking activities.

Student satisfaction is assessed through Alumni and Student Exit Surveys. The results of recent surveys for the department showed that close to 60% of employed alumni respondents said that BYU prepared them quite well or extremely well in their current job. Nearly all (about >90%) of alumni respondents in graduate school said that BYU prepared them effectively or very effectively for graduate school.

- <u>Annual Alumni Networking Event</u>. Since 2016, the department has held its Annual Alumni Networking Event to provide our undergraduate and graduate students the opportunity to meet and visit with the department's alumni and other public health professionals and practitioners.
- <u>Focus Groups</u>. In 2017, the department has conducted focus group discussions with its students, such as those held for the Health Science Emphasis, to obtain their feedback on the new and previous public health undergraduate curriculum and how the curricular changes will impact their future careers and time-to-graduation.

The BYU Public Health Association (BPHA) is a student-run organization sponsored by the Department of Public Health to develop meaningful career and networking opportunities for the students of public health in all four academic emphases: Environmental-Occupational Health, Epidemiology, Health Promotion, and the Health Science Emphasis. The BPHA also offers career planning workshops, such as resume-building, and information on discounted professional conferences in public health.

The department has allocated experiential learning dollars to students and BPHA members to support their travel to professional meetings. For example, the department has sponsored the conference, travel, and/or lodging expenses of BPHA members and other undergraduate public health students to the 2016 APHA in Denver and the 2019 Society of Public Health Education (SOPHE) Conference. These dollars have also been used to print the scientific posters of students whose studies have been selected for poster presentations. For the 2018 fiscal year, a total of \$70,115 experiential learning dollars were distributed to 137 undergraduate and graduate students.

The department should consider various options to deal with the perceived overlap within the undergraduate curricula and between the undergraduate and graduate curricula. These options could include further development of individual courses, or some reorganization of the emphases.

The Department of Public Health developed a self-study document as part of its application for accreditation from the Council on Education for Public Health (CEPH). Both of the department's MPH and undergraduate programs were accredited by CEPH during 2016. This was a re-accreditation for the MPH Program and a first-time accreditation for the undergraduate program.

Following the CEPH accreditation in 2016, the department revamped its entire undergraduate curriculum in 2016-2017. The new undergraduate curriculum was offered in the Fall of 2018. This major curricular overhaul helps reduce redundancies between the undergraduate and graduate programs. All public health undergraduate core courses were changed and new courses were developed in alignment with the Association of Schools and Programs of Public Health (ASPPH) Framing the Future recommendations and CEPH accreditation standards for public health undergraduate education. In addition, new emphasis-specific core courses were developed. The redesign of the undergraduate core curriculum helped to significantly reduce overlap with the MPH as course

work is no longer aligned with the five old core areas of public health: behavioral science/health education, biostatistics, environmental health, epidemiology, and health services administration.

The MPH Curriculum and Learning Committee is currently reviewing the MPH curriculum to explore a possible curricular adjustment to more closely align with the new CEPH accreditation standards. The MPH curriculum modification was intentionally held back to allow for the implementation of the undergraduate curricular changes.

An integrated undergraduate and graduate public health program model (4+1) has been explored by the MPH Program to allow eligible undergraduate students to complete a BS/MPH within 5 years and obtain a head start on graduate education. Because the MPH Program is an emphasis in health promotion, this model will reduce redundancies between the undergraduate and graduate programs – both of which are professional degree programs. Dr. Jeff Glenn developed a Qualtrics survey to assess student interest. Likewise, the faculty's feedback was sought to determine the potential impact on resources. The Spring 2019 discussion on the 4+1 model has been temporarily tabled to focus on modifying/updating the MPH curriculum this Fall 2019.

Develop a system that allows MPH students to change their advisor, if needed, to better align research interests.

The MPH culminating experience was revised in August 2018 to include: (1) a field experience (internship), (2) a capstone course (HLTH 690), and (3) a certification exam (CPH). As such, students were no longer required to complete individual research projects similar to a thesis. Instead, the primary research experience included is integrated as part of the capstone course and is done in partnership with a public health organization. A number of other research projects in previous courses prepare students for this culminating experience.

The role of the faculty advisor and reader was outlined in August 2018 on the MPH Policies and Procedures 4.0. Graduate advisors are assigned by the MPH Director. The assignments are made approximately one month into a student's course of study. Assignments are based on student requests for specific advisors after students have had ample time to meet with faculty to discuss research and career interests. Graduate faculty and students discuss the career goals of the students and mutual interests related to public health. However, the role of the faculty advisor may not correspond to the responsibilities related to research or teaching assistantships received by students. In cases where a student desires to change his/her faculty advisor, the student, may work with the MPH Director to identify other possible faculty advisors. The student will complete and submit the Program of Study Change form and select "change in graduate advisory committee." See http://gradstudies.byu.edu/file/adv-form-3b.

Students who are interested in additional research opportunities can seek out research assistantship opportunities with the faculty member whose work aligns closely with their interests. Each faculty member has access to resources to hire graduate research assistants.

Develop a strategic plan to address MPH core courses in relation to MPH majors without a public health background, and redundancy between undergraduate and graduate courses. Consider a spring or summer term course, or an online course, for non-public health undergraduates so they receive the basics.

The department has implemented several strategies related to improving the MPH program for students. These strategies are outlined above under the recommendation related to "perceived overlap…between the undergraduate and graduate curriculum." Beyond these strategies, the department has also helped address concerns about overlap through advising and admissions. While some BS in Public Health students are admitted to the program each year, the program admits a majority of students from other disciplines and institutions.

Students interested in graduate education who have received an undergraduate degree in public health (e.g., health promotion emphasis) are also encouraged to diversify their preparation by pursuing other graduate programs (e.g., MPA) that would help them be more competitive in the field.

Develop a system that encourages feedback from graduate students during their MPH program and promotes two-way communication.

A governance mechanism is currently in place that allows students to provide feedback. The MPH Director oversees the MPH Student Council comprised of elected graduate students from the program. The MPH Student Council provides feedback and input on the graduate curriculum. The members of the MPH Student Council serve on the MPH Curriculum and Learning Committee and on the MPH Admissions Committee.

Improve communication about resources and funding available to support faculty research and travel.

At the start of each fiscal year, the department chair equally allocates departmental funds to faculty members for student wages, materials and supplies, general and administrative, and travel. This process was started in 2013. To date, this decentralized process has worked well for accommodating the needs of faculty and students.

The department allocates experiential learning dollars through a faculty proposal process. Interested faculty submit a proposal, which is then reviewed by the Department Chair. Generally, all proposals receive funding and for the past two years, all experiential learning dollars have been distributed.

Consider the recommendation made by the external reviewers: "The department chair should explore options with the Dean regarding the possibility of a full-time staff member to assist with department advising, internship placement, internship supervision, and other duties."

As noted above under the recommendation related to "advisement on internships, graduate programs, and career possibilities," we report hiring new staff or reorganizing staff responsibilities in enhance advising undergraduate students, assisting graduate students, and advising on internships.

Explore ways to increase financial resources to facilitate student participation in professional conferences and global activities.

The department has allocated experiential learning dollars to students and BPHA members to support their travel to professional meetings. For example, the department has sponsored the conference, travel, and/or lodging expenses of BPHA members and other undergraduate public health students to the 2016 APHA in Denver, the 2019 SOPHE Conference in Salt Lake, and in other public health conferences. These dollars have also been used to print the scientific posters of students whose studies have been selected for poster presentations.

Mission and Aims

Specifically, what is the relationship between your unit's mission and objectives and BYU's Mission and Aims?

The Department of Public Health (nee Health Science) has changed its name (2018) and has revised its mission statement (2015). The department's core values were revisited and updated annually during the fall faculty retreat (see <u>Appendix 1</u>).

The relationship between the mission of the university and the mission, aims, and core values of the department is found in <u>Appendix 2</u>.

5-7 Year Plan

What do you envision for your unit over the next five to seven years? Where do you want to be and how do you plan to get there?

The vision of the Department of Public Health is to "be acknowledged as the best stand-alone academic public health program in the world and the alma mater of the most influential leaders in public health." Our mission is "to promote health worldwide through transformative teaching, research and service in an environment that builds faith and testimony".

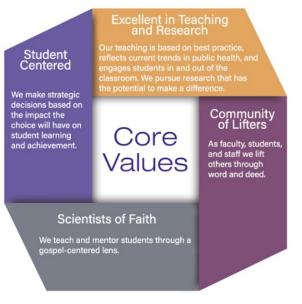


Figure 1: Core Values

The vision and mission of the department were developed during the 2015 fall department retreat. The department established a number of priorities to realize its vision and mission. These priorities include the following:

- 1. Enhance teaching and learning
- 2. Conduct meaningful research
- 3. Enhance faculty expertise
- 4. Nurture alumni and donor relations
- 5. Prepare students to enter graduate school and the workforce.

The department's strategic plan was reviewed and updated during the Fall 2018 department retreat. The Strategic Plan includes the department's priorities, activities, and progress. See <u>Appendix 3</u>.

Outside Influences

How is this vision shaped or influenced by national and global disciplinary trends, unit faculty research groups, and scholarly contributions?

Faculty have recognized that in order to be the best we need to be on the "cutting edge" of how to best prepare students for professional success when faced with the dynamics of a changing world and a global community. This realization helped lead us to the Association of Schools and Programs of Public Health (ASPPH) Framing the Future initiative (see: <u>https://www.aspph.org/teach-research/framing-the-future/</u>) which provided an important framework through which we evaluated our BS in Public Health program. Significant revisions were

made to our curriculum based on this framework including but not limited to an entire revamping of the major core.

In general, the Framing the Future report provided important recommendations for education in public health that informed the revision of accreditation criteria in 2016. Our revisions based on this framework, prepared us for the Council on Education for Public Health (CEPH) accreditation visit in 2016 where the BS in Public Health program was added to the self-study process for the first time. The MPH program has been accredited since 2003 and was re-accredited in 2016. As such, both graduate and undergraduate public health programs in the department are now accredited by CEPH until 2023.

As reflected in the new CEPH accreditation criteria and other recent scholarly articles, there is an increasing recognition that solving public health problems requires a more interdisciplinary approach that applies systems thinking and relies on collaboration between the public and private sectors. Progress will be much slower if public health researchers and practitioners stay within traditional siloes. The department has responded to these trends by expanding research collaborations beyond our own discipline (e.g., Families and Public Health lab, Computational Health Science Collaborative), hiring faculty with expertise in systems thinking (i.e., Dr. Jeff Glenn), and integrating concepts related to interdisciplinary approaches and systems thinking into didactic courses. Additionally, two faculty members in the department received an internal Interdisciplinary Research (IDR) Origination Award during 2019 in collaboration with faculty in education, psychology, and statistics.

Other Potential Issues

Discuss any other issues pertinent to your unit's long-term direction and planned achievements.

The department is currently working to address several challenges including teaching loads, accreditation expectations, state-of-the-art program offerings, and physical space.

- <u>Teaching Loads</u>. Currently, faculty in the department teach five didactic courses a year. Efforts are underway to reduce didactic teaching loads for faculty to four courses a year. This effort is motivated by the need to better account for and give credit to mentored research and experiential learning opportunities.
- <u>Accreditation Criteria</u>. CEPH modified its accreditation criteria in 2016. The MPH is working to address one additional compliance item and will submit a final report to CEPH during January 2020. Additional new accreditation expectations have been added which the department will need to respond to prior to the 2023 site visit. The department will begin a CEPH self-study in 2020.
- <u>Program Offerings</u>. The department has both academic (e.g., epidemiology, health science) and professional degree (e.g., health promotion, environmental/occupational health) programs. Ensuring that our academic programs prepare students to succeed in graduate education is important. Similarly, ensuring that our professional programs prepare students to succeed in practice is important. Both require careful attention to feedback received from stakeholders, including but not limited to: our current students, alumni, and professionals in the field. Feedback has helped departmental faculty revise the curriculum and will help guide future conversations on:
 - 1. Revisions in the BS in Public Health emphasis areas
 - 2. Revisions of the MPH curriculum
 - 3. Inclusion of emphasis areas into the MPH program
 - 4. Offering combined degrees at the graduate level (e.g., MPH/MPA)
 - 5. Proposal for a terminal degree program (e.g., DrPH and/or Ph.D.)
 - 6. 4+1 BS+MPH option

- <u>Classroom Space</u>. The department has seen outstanding growth in the last 11 years, in terms of both student enrollment and faculty/staff lines. This growth has created challenges relative to the identification of appropriate classrooms for instruction on campus and offices for staff.
- <u>Office Space</u>. Our internship coordinator (Lutz) has historically occupied office space in the Life Sciences Advisement suite. Due to space shortage and at the request of the Life Science Advisement staff, we recently moved Lutz to a faculty office that was vacated by the departure of Dr. Rosemary Thackeray to a university administrative position. As such both Liechty and Lutz are occupying faculty offices. One of those offices will be needed during 2020 when we hire Dr. Thackeray's replacement. We are currently lacking one office space. The department chair is exploring alternatives including but not limited to the McDonald Building and renovation of 2037 LSB.

A. General Program Information

New Programs

Are there any new programs being planned within the unit? If so, what are the costs (real or opportunity costs) of introducing and sustaining these programs? Are there any internal resource reallocations (faculty, staff, equipment, space, etc.) that would be required to support these program changes and/or additions?

At this time, no new programs are being actively considered within the department. An integrated undergraduate and graduate public health program model (4+1) has been explored that would allow for some of our undergraduate students to complete a BS/MPH within 5 years. Such a model would provide undergraduate students a head start on graduate education. Because the MPH includes an emphasis in health promotion, this model would reduce redundancies between the undergraduate and graduate programs – both of which are professional degree programs. Dr. Jeff Glenn developed a student's survey via Qualtrics to assess student interest. The faculty's feedback was also sought to determine the potential impact on resources. The Spring 2019 discussion on the 4+1 model has been temporarily tabled to focus the department's energy this Fall 2019 on modifying/updating the MPH Program. The MPH curriculum modification was held back to allow for the implementation of the undergraduate curricular changes.

Some discussions have also occurred relative to a terminal degree program, such as a DrPH or Ph.D. According to CEPH criteria, having a terminal degree is required for the department/program to be designated as a "school" of public health. In addition, 21 primary instructional faculty are required for a "school." The department currently has 20 FTE. While the department meets many of the CEPH accreditation guidelines to become a school of public health, additional questions remain unanswered such as how a school of public health would fit within our current college/university administrative structure. While moving to a school of public health is a possible long-term proposition, it will continue to be vetted by faculty, advisory committee members, and administration for feasibility.

Faculty Mentoring

What are your unit's current programs and future plans for maintaining or increasing faculty mentoring of students?

One of the core values in the department is that faculty are committed to "being student-centered." As such, all strategic decisions, including research directions and efforts, are based on the impact the choice will have on student learning and achievement. All faculty in the department are therefore committed to involving students in their research agendas and moving that research towards presentation and publication.

While individual faculty take on students as research assistants or for mentored research, departmental collaborative research labs involving multiple faculty collaborators have also allowed students an opportunity to engage in the research process. In both cases, students become involved in various stages of the research process including but not limited to problem identification, study design, data collection, analysis and writing/presenting.

Faculty in the department have financial resources in their research accounts to support student involvement in research. During the 2018-2019 academic year, a total of 100 students (graduate and undergraduate) were hired as research assistants totaling \$78,309 in wages.

Over the past couple of years, several faculty have established collaborative research labs. Until recently, these collaborative endeavors have not been formally organized in the department but are now providing exciting opportunities for students to connect with faculty research, conduct research, and publish/present findings. Examples of operational labs within the department are listed in Table 1.

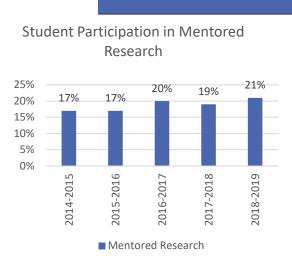


Figure 2: Student Participation in Mentored Research

Lab	Faculty	Number of Students 2018—2019
Environmental/Occupational	Thygerson, Johnston	7
Families and Public Health	Crandall, Magnusson, Barnes, Novilla, Hanson	17
Health Behavior Outcomes (HBO)	Crookston, West, Hall	3 (Peru), 4 (Paraguay)
Computational Health Science	Hanson, Barnes, Thackeray	4
HealthY Coalition, Assessment Lab	Crandall, Hanson, Barnes	5

Beginning in Spring 2019, the Families and Public Health Lab began offering a 1-credit research skills class designed to expose more students to the process of research and to prepare students with skills that increase their ability to contribute to research across the department.

Are there adequate opportunities for student access to faculty and their research?

During the 2018—2019 academic year, there were 669 undergraduate majors and 25 graduate students in the department. With such a large number of undergraduate majors, not all students who wish to participate in mentored research are able to do so. However, as demonstrated in <u>Appendix 4</u>, a total of 345 students participated in 166 mentored activities during 2018. These numbers have consistently grown each year since 2013.

As of 2018—2019, 20 full-time faculty in the department were available to mentor students in research. It is anticipated that a few additional opportunities for individually mentored research will be available as recently hired faculty increase the capacity of their labs. However, during this academic year 2018—2019, two department faculty (Thackeray, Barnes) were assigned to administrative roles within the college which have reduced our capacity for mentored research. Additionally, during summer 2019, one full-time faculty member (Thackeray) was appointed as an Assistant to the President, necessitating a new search during the 2019—2020 academic year.

Table 1: Department of Public Health Research Labs

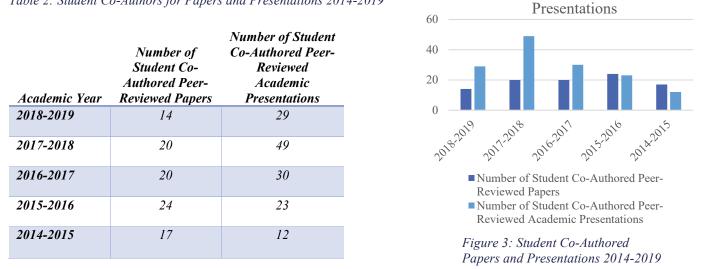
It is fully expected that the department will continue to provide exceptional research mentoring opportunities to students despite administrative assignments.

What opportunities are available for undergraduate and graduate students to publish or present their mentored research?

Students have numerous external and internal opportunities to publish and present their mentored research. Faculty maintain involvement in numerous professional societies and guide students toward appropriate venues for publication of mentored research. Appendix 5 provides evidence of student-authored/co-authored papers and presentations over the past five academic years. In summary, of the 49 journal articles published by faculty during 2018, 22 involved students. Of the 53 presentations made by faculty during 2018, a total of 29 students participating in mentored research were able to publish and/or present their work in a disciplineappropriate journals or national and international conferences of professional academic societies. See Table 2 and Figure 3 for trends over time.

Student Co-Authored Papers and

Table 2: Student Co-Authors for Papers and Presentations 2014-2019



Beyond the external opportunities, students have access to opportunities within the college. The College of Life Sciences hosts the annual inaugural CURA Poster Session during Winter semester. This session provides students who have received CURA (mentored research) awards one opportunity to present their research and compete for additional monetary awards. Each department in the college, including the Department of Public Health, provides faculty who are responsible for judging the posters. During 2019, a total of 115 mentored research students who were working with faculty in the college presented their posters. Each department had two winners. Poster winners from the Department of Public Health were:

- Aaron Cheung Forgiveness as a Tool for Improving Executive Functioning in Adults (Mentor: Crandall) •
- Westin Wong Improving Community Health Worker Self-Efficacy Through Web-Based Training (Mentor: • West)

Additionally, the Harold B. Lee Library (HBLL) sponsors an undergraduate poster competition. This competition, under the direction of our HBLL liaison Michael Goates, is held each spring. During 2019, a total of 58 posters were presented from the College of Life Sciences. The overall winner during 2019 was from the Department of Public Health:

- Shelby A. Smith Air Pollution and the Risk of Outdoor Winter Exercise (Mentor Johnston)
- Public Health students who are engaged in gerontology research have also presented posters at the BYU Gerontology Conference and at the BYU College of Family, Home, and Social Sciences undergraduate poster session.

Inspiring Learning

How are your faculty encouraging "INSPIRING LEARNING" in your department through experiential learning, researching, mentoring, study abroad, etc.?

The majority of students participating in mentored research do so through arrangements with individual faculty members. Table 3 provides summary data of students participating in research with faculty members during the past 5 years.

Academic Year	Enrolled Students		Students Participating in Mentored Research (N)	Enrolled Students Participating in Mentored Research (%)	Full-Time Faculty (N)	Students Participating Per Faculty Member (Avg)
	Under- grad	Grad				
2018-2019	669	25	143	21	20	7
2017-2018	650	23	130	19	19	7
2016-2017	648	25	133	20	19	7
2015-2016	650	25	115	17	19	6
2014-2015	702	23	123	17	17	7

Table 3: Students Participating in Mentored Research, 2014-2018

The faculty in the department identify inspiring learning opportunities on an annual basis and submit miniproposals to the department chair for funding support. Activities funded during the 2018—2019 academic are presented in <u>Appendix 6</u>. Inspiring learning activities have been integrated through a number of mechanisms including but not limited to the public health curriculum, mentored research activities, study abroad programming, and domestic/internal field experiences. The following are selected examples of how experiential learning has been integrated into the public health undergraduate and graduate curriculum.

- HLTH 314: Health, Disease, and Their Determinants, Part 1 Students conduct an interview with an individual person in the community who is experiencing chronic disease, or a family member of that person (if the person themselves is unable to be interviewed, i.e. cognitively impaired, etc.). Students use these interviews, along with other background research, to write biographical narrative essays that communicate the importance of chronic diseases in public health. The objective is for students to understand and articulate connections between the individual-level experience of disease and bigger-picture public health issues.
- HLTH 315: Health, Disease and Their Determinants, Part 2 Students complete interviews with public health professionals. Students are provided with a list of health topics to select from. For this course, they are required

to conduct a literature review on their chosen topic and to identify and conduct an interview with an expert on that health topic. This experience exposes them to the public health profession through experiences with professionals across a wide range of disciplines within public health.

- HLTH 322: Environmental Health; HLTH 429: Sampling and Exposure Assessment Lab II; HLTH 606: Environmental Health Sciences During the winter semester of each year, the Utah County Health Department organizes a Household Hazardous Waste collection event. Students in two undergraduate and one graduate course attend the event and assist in collecting and sorting the household hazardous waste for environmentally safe disposal. In 2018, this event collected more than 50 tons of chemical waste which would otherwise go to landfills, potentially contaminating soil and groundwater.
- HLTH 324: Occupational Health and Safety; HLTH 426: Fundamental of Toxicology Students in both courses go on at least 3 field trips each semester to local companies. Students perform occupational health evaluations such as noise assessments, hazard inspections, and chemical inventories for these companies. Recent field trips include McWane Ductile (an iron pipe manufacturer) where the students learned about the safety management process and conducted a safety inspection and the BYU Chemical Management Building to conduct a hazard scavenger hunt.
- HLTH 423: Integrating Public Health and Primary Care In this Health Science Emphasis-specific course, teams of students partner with local public health and primary care organizations (Utah County Health Department (UCHD), UCHD Clinic, Revere Health, Mountainlands Community Clinic, and IHC Merrill-Gappmeyer Clinic) to identify, develop, and implement a two-week trial run of an inquiry-based project that addresses an actual need or challenge in integrating public health and primary care. Each student team develops a short but meaningful project that is doable in a semester, which incorporates 3-5 sustainable and cost-effective approaches to integrating public health and primary care by addressing the social determinants of health. This may include processes relevant to cost and access to care and community resources, and patient education. During the two-week project trial run, the students will identify the factors that hinder or promote project implementation. Following the trial run, students will dialogue with their respective partner organizations to solicit their feedback. The students will present their results and their revisions to the project design or implementation through oral and written reports.
- HLTH 431: Health Communication and Advocacy Students participate in applied community projects with a community partner (e.g., American Cancer Society, Utah County Health Department). In class, students learn advocacy approaches and legislative processes and get to know their representative/senator well enough for a brief interaction at the State Capitol. Additionally, students gain experience identifying local/state stories, data and relevant facts for delivering a brief message for their community project at the Day at the Capitol visit. Students write a summary report of their Lobby Day experience, which may include pictures-in-action.
- HLTH 434: Advanced Program Evaluation Each semester, students collaborate with a public health agency (e.g. United Way) to develop an evaluation plan that the agency can implement. Students meet with collaborators and stakeholders to discuss agency needs and work in groups to develop the evaluation plan. Plans are presented to stakeholders at the agency. Student's receive feedback on the quality of their work as well as professionalism through the process.
- HLTH 439: Advanced Program Planning; and HLTH 612: Program Planning and Evaluation Each semester, students work with different agencies (e.g., United Way, Utah County Health Department). Students work in teams to develop a program plan that fits the need of the community partner. During the semester, teams work with the partner to receive feedback on their projects and to help ensure that they are building a product that is useful to the partner. The final program plans are given to the partner for implementation. In HLTH 612, MPH students also have the opportunity to develop leadership skills as they lead teams of undergraduate students in the development of the program plan.

- HLTH 493: Epidemiology Capstone Students conduct epidemiologic research using various secondary data sources, such as the National Health and Nutrition Examination Survey (NHANES). The students are using real data to address real questions, and their projects are potentially publishable. The objective is for students to discover and communicate new knowledge about the epidemiology of diseases or other health indicators. Two of seven student groups from the Winter 2019 course are now pursuing publication of their capstone work.
- HLTH 625: Population-Based Health Promotion Interventions Students attend the three-day Annual Public Health Education (APHA) Advocacy Summit in Washington DC, in mid-October. The summit skill-building experience, providing basic to advanced advocacy training on issue-specific legislative priorities. Experienced professionals from the government relations' staffs of key public health organizations provide the training. Following the training, students arrange legislative advocacy meetings with legislative offices for the states in which each student (or their parent) hold residency. Students conclude the experience by writing a detailed report and a 2-page Constituent Dossier.
- HLTH 630: Small Group Health Promotion Interventions Students complete a photovoice project. In each semester of instruction, an instructor identified organization is chosen (e.g. Centro de la Familia). Working with the organization students conduct a photovoice project. The objective of the project is to have students work with an underserved community to highlight their community and to attract the attention of other stakeholders. The photovoice approach requires students to explore community needs from the perspective of community members and allows students to practice cultural humility through working with underserved populations.

The majority of students participating in mentored research do so through arrangements with individual faculty members and in collaborative research labs (see Table 1). See the "Faculty Mentoring" section for additional information. Additional evidence on inspiring learning through international and domestic experiences is provided in the section below.

Do students have international or domestic experiences made available to them?

Public health students have access to a variety of international study abroad and internship experiences. These include the following:

• <u>Europe Public Health Study Abroad</u>. Students have the opportunity each summer to participate in the Europe Public Health Study Abroad. This 5-week experience exposes students to some of Europe's most healthy environments and people (e.g., Sweden & Netherlands). Health Promotion classes are offered as part of the study abroad, including HLTH 335, HLTH 383, and HLTH 480. A limited number of students have also been eligible to complete the Health Promotion internship, HLTH 496R during their time in Europe. Public health faculty lead the study abroad (Crookston, West, and Hall) and participating students take classes, meet with local officials working in public health (e.g., city planners working to improve infrastructure for bike commuters), visit the World Health Organization, and strengthen connections with faculty mentors and other participating students. The program started in 2016 and is an annual, summer-term program. Approximately 40 students are accepted each year. See Table 4.

Table 4. Europe Public Health Study Abroad

Year	Students	# Countries	Countries Visited
2016	39	5	UK, Netherlands, France, Switzerland, Italy
2017	34	7	UK, Netherlands, France, Belgium, Denmark, Austria, Germany
2018	40	6	UK, Netherlands, France, Belgium, Denmark, Switzerland
2019	41	8	UK, Netherlands, France, Belgium, Denmark, Switzerland, Sweden, Austria

- <u>Nepal Internship Program</u> For the past two years, environmental/occupational health (EH/OH) faculty (Thygerson, Johnston) have taken 16 students to Nepal to study EH/OH in the brick manufacturing sites. Brick manufacturing in this setting in the developing world is very hazardous to employees and has a significant impact on the surrounding community. The purpose of the internship is to allow students to apply EH/OH evaluation skills to a manufacturing process in a developing country. Students acquire hands-on experience with instruments used for collecting occupational exposure data and how to analyze the results of this data. Students further gain experience in interacting with various stakeholders within the organization including, owners, union workers, brick makers and the entire brick community in the villages. Exploring occupational health in a poorly regulated environment allows students to better understand the role of occupational health and safety and the importance of appropriate regulation in these environments. Students witness child labor, bonded labor, and slave labor, bringing the challenges of labor throughout the world into focus. Working with the Nepalese people exposes students to cultural diversity and encourages students to be more sensitive to cultural values.
- <u>Global Health Internship Program</u> The Global Health Internship Program (Page) is entering its sixth year. Over the course of these six years, the program has experienced growth in terms of the number of program sites offered and the number of students involved. Table 5 and Figure 4 summarizes participation in the global health internship experience for academic years beginning in 2014. The goal of the program is to provide students with field experiences (often referred to as global health internships) providing exposure to public health, clinical practices, service learning, social services, social determinants of health, culture, human resources for health, and other educational experience. Additionally, global health internships offer first-hand experiences alongside public health experts and/or local health workers and combine instruction, experience, service, and reflection, to create a model that supports communities, health care workers, and organizations abroad. Many students are struck by poverty, resource limitations, and a multitude of challenges leading to high burdens of illness, death and reduced quality of life. This gives a new, valued perspective as they move forward with schooling and careers.

Year	Programs	Total Students (N)	Public Health Students N (%)	Countries
2014	2	15	9 (60)	India, Cambodia
2015	3	30	13 (43)	Ghana, Panama, Cambodia
2016	5	38	18 (47)	Ghana (2 programs), Panama, Cambodia/Vietnam, Spain
2017	7	58	23 (40)	Ghana (2 programs), Peru, Cambodia, Thailand, Spain, Portugal
2018	10	83	29 (35)	Ghana, Peru, Mexico, Rwanda (2), Zambia, Spain, Portugal, Italy, (Cambodia/Thailand/Vietnam)
2019	14	107	18 (17)	Ghana, Uganda, Zambia, Rwanda, Argentina, Mexico, Vietnam/Thailand, Greece, Spain, Portugal

Table 5: Global Health Internship Programs and Participation

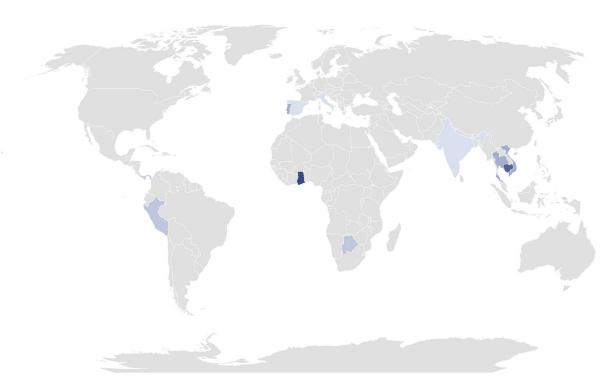


Figure 4: Global Health Internship Program Locations Since 2014

Powered by Bing © GeoNames, HERE, MSFT, Microsoft, NavInfo, Thinkware Extract, Wikipedia

Domestically, public health students have access to various experiences through their coursework as indicated above. Additional experiences include but not limited to the following:

- <u>Domestic Internship Program</u>. Public health students in all four emphasis areas have had the opportunity to apply the public health skills and knowledge obtained through the curriculum into practical public health settings through our department internship program (coordinated by Lutz). Graduate students in the MPH program are also required to complete an internship (coordinated by the faculty advisor, Lutz/Riggs). At the undergraduate level, the internship is considered a culminating experience and is currently required for all health promotion, health science, and environmental/occupational health students; it is offered as elective credit for epidemiology students. During the internship, students will "obtain experience, as proctored by an approved internship supervisor, to apply professional competencies in public health students seek, secure, and complete local internships within Utah while finishing their degree, with a smaller portion of students' completing internships throughout the United States or globally. With significant department support and guidance, students identify their own internship opportunities through networking or department advertised opportunities as ours is not a placement program. The structure of the department internship program has allowed as many as 125+ students to successfully complete internships each year.
- <u>American Evaluation Association (AEA) Conference</u>. Under to leadership of one public health faculty member (Thackeray), three undergraduate public health students who had completed the HTLH 434 Advanced Evaluation Methods course attended the 2018 American Evaluation Association Conference in Cleveland, OH. This is the largest evaluation conference in the country. Students presented a 45-minute interactive breakout session entitled: "Framing is the Key: Practical Ideas for Teaching Novice Evaluators How to Write Questions." The students facilitated the entire session. Approximately 30 people attended. During this experience of preparing for and presenting at the AEA conference, students learned: (1) the process of submitting a conference abstract; (2) how to prepare for an effective conference presentation; and (3) how to get the most out of attending a professional conference.
- <u>American Society of Safety Professionals (ASSP)</u>. The EH/OH faculty (Thygerson, Beard, Johnston) collaborate to sponsor a student club called BYU ASSP student section, which is recognized by the National ASSP society and local Utah chapter. Students volunteer at the local ASSP conferences, attend Utah chapter meetings, take field trips to local companies to see and evaluate occupational health, and organize guest speakers to present at BYU chapter meetings. The student leadership officers attend the Future Safety Leaders Conference in Chicago every year and are invited to the ASSP leadership conference in Las Vegas each year. This club provides a useful network for students that has led to internships and employment opportunities for several students.

How is Experiential Learning impacting student education and placement in their profession?

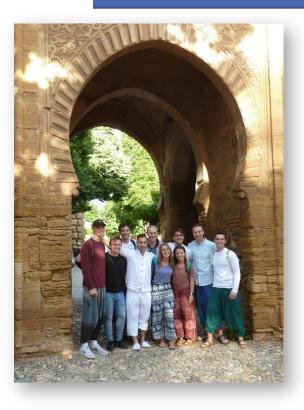
In the most recent Senior Exit Survey conducted in 2017, when asked what are the strengths of the program as well as what would you change about the program, a great number of students mentioned hands-on learning experiences, internships, and mentored research. They expressed both their appreciation for the experiences and how the experiences enhanced their education as well as the desire for more of them. Some of the comments made were:

- "I also enjoyed the required internship because it applied what was taught and gave work experience in the field."
- "I would provide more real-life experiences throughout the program to give us a better understanding of what is to happen after graduation."

• "I would have liked to have more opportunities to work out in the real world. I had the opportunity in my methods in health promotion class to lobby and talk to a lot of people in the community and really enjoyed applying what I was learning outside the classroom."

Since this survey was conducted, the department has increased the opportunities to participate in hands-on experiences outside the classroom by providing funding directly to students to attend conferences, participate in mentored research, present research at conferences, and participate in national and international internships.

Students have also expressed the importance internships can have in helping them find jobs after graduation. In the BYU Alumni Questionnaire (2015 cohort as of 2018), alumni were asked which resources were most instrumental in helping them acquire their full-time job after finishing their most recent degree (Q30b). Internships was the third-highest response given (15%), behind Friends/Relatives (28%) and Internet/Newspaper ads (25%).



How do you anticipate Experiential Learning impacting curricular decisions?

During the 2016—2017 academic year, the department underwent a curriculum redesign. The undergraduate curriculum was revised to align with Framing the Future recommendations and CEPH accreditation standards. One goal of the redesign was to increase the role of experiential learning across the curriculum. As part of this redesign, experiential learning activities have been incorporated into many-core and emphasis specific courses as explained above. Additionally, culminating experiences have been built into undergraduate programs of student that did not previously have them, such that now all four undergraduate emphases and the MPH program have internships/fieldwork and/or capstone experiences that are specific to the public health discipline. These experiences ensure that students will have the required experience prior to graduation.

Future curriculum decisions will continue to be made with the objective of increasing student's exposure to experiential learning through "out-of-class" experiences within the community and in-classroom experiences that use "real-world" data or experiences to build professional skills and enhance student's competitiveness for preparation for graduate school and professional work.

Continuing Education

Does your unit offer courses through the Division of Continuing Education (Evening School, Independent Study, Salt Lake Center, and/or Bachelor of General Studies degree)? If so, how are faculty selected? What systems are in place to assess and assure the quality of these courses?

The following courses are currently offered as independent study:

• HLTH 330: Principles and Practices of Health Promotion

- HLTH 335: Health Behavior Change
- HLTH 345: Principles of Epidemiology
- HLTH 420: Injury and Violence Prevention
- HLTH 436: Sexuality Education in the Curriculum
- HLTH 440: Introduction to Statistical Computing in Epidemiology
- HLTH 480: International Health

Under the present system, faculty may propose offering an independent study (IS) course to the Division of Continuing Education following approval by the Undergraduate Curriculum and Learning Committee, faculty, and department chair. Faculty work with IS to design a course that is closely related to the on-campus version, allowing for differences in the teaching methodology (IS vs. in-class). Only full-time faculty in the department are involved in offering IS courses.

The following courses are currently offered as evening school:

- HLTH 320: Advanced First Aid and Safety
- HLTH 335: Health Behavior Change
- HLTH 383: Mind Body Health
- HLTH 403R: Positive Psychology
- HLTH 413: Refugee and Migrant Health
- HLTH 460: Substance Abuse and Addictive Behavior
- HLTH 466: Health and the Aging Process
- HLTH 480: International Health

The total number of evening courses offered by semester/term is illustrated in Figure 5.

The department chair, in consultation with subject matter experts, selects instructors for evening school course offerings. Additionally, the chair consults with each new evening school adjunct instructor to ensure they are familiar with university/department protocols and expectations. For example, whereas course learning outcomes have been established by the fulltime faculty as a whole, adjunct instructors are expected to design learning experiences that achieve those learning outcomes. In addition, it is expected that course assessments are consistent across sections of the same course in order that programmatic learning outcomes can be measured. Full-time faculty who have taught the same course also consult with adjunct instructors to ensure consistency of course expectations. Finally, the department chair monitors student ratings and course grades. Adjustments are made when necessary.

The department does not offer courses through the Salt Lake Center or the General Studies program. HLTH 320: Advanced First Aid and Safety was previously offered through the Salt Lake Center but was later canceled due to low enrollment.

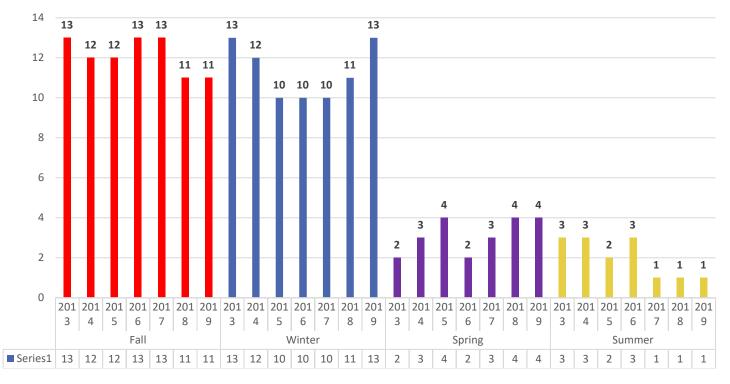


Figure 5: Evening Courses Offered by Semester/Term 2013-2019

Service Courses

Discuss your unit's service course offerings and other class enrollments. Are there any trends that need attention?

The department does not presently offer any general education courses. Service courses currently offered in the department that consistently include more than 50% of non-public health majors are the following:

- HLTH 201: Contemporary Issues for Student-Athletes
- HLTH 320: Advanced First Aid and Safety,
- HLTH 335: Health Behavior Change
- HLTH 383: Mind Body Health
- HLTH 460: Substance Abuse and Addictive Behavior
- HLTH 481: Applied International Health

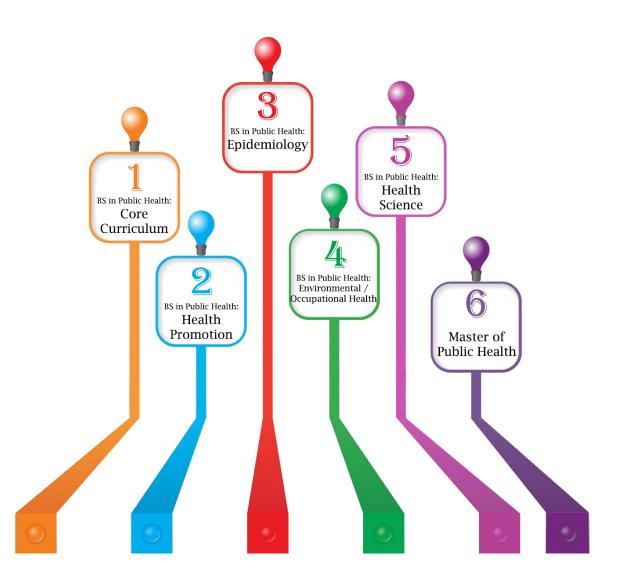
Overall enrollment numbers for selected service courses are provided in <u>Appendix 7</u> followed by a table summarizing the percentage of students in each course that are not public health majors. A review of the enrollment trends revealed that enrollments have stayed relatively consistent over the years. Numbers in HLTH 345 declined starting in 2018 due to its removal as a required core course in the public health curriculum. Following consultation with the epidemiology coordinator and faculty, the department chair has adjusted this course offering.

B. Review of Each Program

The Department of Public Health offers a BS in Public Health with four emphasis areas (Health Promotion, Epidemiology, Environmental/Occupational Health, Health Science). All BS in Public Health students are required to complete the public health core curriculum as part of the major (see <u>Appendix 8</u>). The department also offers the Master of Public Health (MPH) program (see <u>Appendix 9</u>) and a minor in school health education.

Programmatic learning outcomes have been established for:

- 1. BS in Public Health Core Curriculum
- 2. BS in Public Health Health Promotion Emphasis
- 3. BS in Public Health Epidemiology Emphasis
- 4. BS in Public Health Environmental/Occupational Health Emphasis
- 5. BS in Public Health Health Science Emphasis
- 6. Master of Public Health (MPH)



1. BS in Public Health – Core Curriculum

Learning Outcome Updates

After reviewing the program's Learning Outcomes and Assessment table, discuss any issues that need to be updated. Include the updates in the final version of alignment tables for each program.

The newly-revamped undergraduate curriculum was launched for the first time last Fall 2018. Program-level and emphasis-level learning outcomes were developed. The new set of six core courses for public health majors include the following: HLTH 210, 312, 313, 314, 315, and 316, which replaced old core courses.

The Learning Outcomes and Assessments alignment table for the public health core curriculum has been updated at <u>https://learningoutcomes.byu.edu</u>. For actions taken or planned (column 4), a brief summary of implementing the six new courses (actions taken) has been provided. Planned actions for the 2019—2020 academic year were added after drawing conclusions from Fall 2018 and Winter 2019 assessment data.

The complete alignment table for the BS in Public Health core curriculum is found in <u>Appendix 10</u>.

System for Assessment of Learning Outcomes

Discuss your system for assessment of learning outcomes. What processes do you have in place for regular program assessment?

Our system for assessment of learning outcomes:

- Assessment of the core public health curriculum is the primary responsibility of the Undergraduate Curriculum and Learning Committee. This committee is led by the associate chair (Novilla) and includes each of the emphasis area coordinators (Magnusson, West, Thacker, Thygerson).
- Assessments have been identified by the faculty for each public health core course HLTH 210, 312, 313, 314, 315, and 316 as direct measures of students' achievement of core learning outcomes. The specific assessments linked to each learning outcome are listed in the Learning Outcomes and Assessments table for the public health core in learningoutcomes.byu.edu.
- Targets for each assessment is that at least 80% of students score 80% or above.
- Data are collected by faculty every semester that the courses are offered and shared with Emily Eyre, our assessment coordinator.
- Conclusions are drawn based on the evidence. Actions are planned or taken based on conclusions.

Improvements

Discuss your use of assessment data for improvement in this academic program. What are some of the specific improvements that have been made as a result of your assessment of student learning outcomes?

In Fall 2018 a new set of six courses were launched that constituted the public health core curriculum for all public health majors (see Table 6).

Table 6: Public Health	Core	Curriculum	Changes	2018
1 u o u o 0.1 u o u o 11 c u u u	Curc	Curriculum	Chunges	2010

Old Curriculum		New Curriculum	
HLTH 100 – Intro to Public Health	1	HLTH 210 – Foundation of Public Health	3
HLTH 310 – Chronic Disease	3	HLTH 312 – Intro to Planning, Interventions, and Evaluation	3
HLTH 311 – Infectious Disease	3	HLTH 313 – Intro to Data Collection and Analysis	3
HLTH 322 – Environmental Health	3	HLTH 314 – Health, Disease, and Their Determinants, Part 1	3
HLTH 330 – Principles and Practices of Health Promotion	3	HLTH 315 – Health, Disease, and Their Determinants, Part 2	3
HLTH 345 – Principles of Epidemiology	3	HLTH 316 – Influencing Health Through Health Systems and Policy	3
Total Credits	16	Total Credits	18

These improvements were based on a big-picture overhaul of our entire curriculum, both for the public health core and for each emphasis area. The overhaul was influenced by national trends in public health education and a desire to increase collaboration, coordination, and communication amongst faculty who teach the six core public health courses. The new courses were collaboratively designed by multiple faculty from 2017—2018 and launched in Fall 2018. Ongoing efforts are being made to maintain close collaboration, coordination, and communication.

Assessment data from Spring 2019 have been used to draw conclusions about the effectiveness of the new set of six core public health courses. Actions have been planned for improvement in the 2019—2020 academic year.

Potential Issues

What are the present and future issues that might impact the continuation or adaptation of the program and related courses?

In the wake of launching the six new public health core courses, no immediate plans for an additional adaptation of the program are anticipated. However, given the changing needs of the public health workforce it is likely that we continue to revisit both the graduate and undergraduate public health curriculum in response to stakeholder feedback. Ultimately our desire is that graduates of our professional programs are as prepared as possible for practice.

Trends

How have your unit's enrollment trends and program changed over the past five to seven years? Do these reflect trends in the discipline? If these trends continue, what adjustments will need to be made?

The discussion of "enrollment trends" in this section applies to the BS in Public Health as a whole and not any one emphasis area within the major. Undergraduate degrees awarded in the public health major hovered around 200 students for five academic years beginning in 2013—2014 and ending in 2016—2017 (see <u>Appendix 11</u>).

Degrees awarded dropped to 149 degrees during the 2018—2019 academic year. This decrease may be due to the fact that many students tried to push through faster on the old curriculum in order to avoid any conflicts due to curricular transition.

Overall enrollment in the public health major peaked in 2017 with 780 students during the Fall semester and 800 during the Winter semester (see <u>Appendix 12</u>). Since that time, the enrollment numbers have declined to 705 students during Fall semester and 739 during Winter semester 2018. This decline corresponds with changes made in the undergraduate public health curriculum. Enrollments during Spring/Summer terms in didactic public health courses are also a bit lower, possibility due to spring/summer experiential learning (e.g., internships, study abroad, etc.) activities.

As noted above under the "Improvements" section, changes to the public health core curriculum were instituted during 2018. Again, these changes were largely based on national trends in public health education as well as accreditation expectations.

Campus Connections

Does your unit have any connections with other degree programs on campus? If so, discuss those relationships.

The department has connections with two other degree program on campus, the Gerontology Minor and the Teacher Education Program.

- <u>Gerontology Minor</u>. We offer the following courses as electives: HLTH 466: Health and the Aging Process, HLTH 320: Advanced First Aid and Safety, HLTH 450: Women's Health Issues, HLTH 491R: Mentored Research and HLTH: 496R Academic Internship. Academic advisors may also substitute other HLTH courses as electives for the Gerontology minor, provided that the courses cover material applicable to the health of older adults. Our relationship with the Gerontology program is good. Currently, two faculty members, Ray Merrill, and Evan Thacker serve on the Gerontology program committee, and additional faculty members, Mike Barnes, Len Novilla, and John Beard, are faculty affiliates of the Gerontology program. Faculty affiliates engage in mentored research with Gerontology minor students.
- <u>Teacher Education</u> Program. Whereas the department has retained the minor in school health education, the department remains involved with the BYU educator preparation program (EPP) through the Office of the Academic Vice President. Dr. Cougar Hall is a member of the Initial Programs Council (IPC) which is chaired by the EPP director.

Student Satisfaction

Discuss student satisfaction as measured by student and alumni surveys, exit interviews, and external or internal program reviews.

Caution should be exercised when interpreting some cells in the senior survey results (see <u>Appendix 13</u>) and alumni questionnaire results (see <u>Appendix 14</u>) due to a lower response rate. As noted above, roughly 200 public health students graduate per year, but only about 120 or so per year (60%) complete the senior survey, and only about 80 or so per year (40%) complete the alumni questionnaire. Failure to respond to the survey is not likely to be random. The following discussion applies to public health majors as a whole and not to any one emphasis area.

A large majority of respondents to the 2016—2017 senior survey anticipated being employed full-time in public health (about 40%) or in graduate/professional school (about 25%) within one year of graduating. Three years later in the alumni survey, a smaller majority indicate being employed full-time in public health (about 25%) or being in school full-time (about 15%). The shift seems to be primarily toward graduates becoming full-time homemakers. In the senior survey, only about 5% report an intention to be a homemaker or stay at home parent during the first year, and then three years later in the alumni survey, about 25% report being full-time homemakers.

A large majority of senior survey respondents indicate that their educational experience at BYU was excellent (about 50%) or good (about 35-40%). Three years later, alumni questionnaire respondents indicate even greater satisfaction, with about 60% saying their educational experience was excellent, and about 30% saying it was good.

A little over half of the senior survey respondents (about 55%) indicate they would choose public health again if they started college over, with about 20% being uncertain and the remaining, about, 25% saying they would not choose public health as a major. Three years later, a smaller percentage of alumni respondents (about 45%) say they would choose public health again, with about 20% uncertain and the remaining 35% saying they would not choose public health again.

About half (50%) of senior survey respondents say they worked regularly with a faculty member outside of class. About 60% of alumni questionnaire respondents who are employed say BYU prepared them quite well or extremely well of their current job. Nearly all (about >90%) alumni questionnaire respondents who are in graduate school say BYU prepared them effectively or very effectively for graduate school.

Demographic Trends

Taking into consideration demographic trends of the program's students over the last five years, what are your unit's plans and processes for admission and recruitment? How could they be improved?

The following discussion applies to public health majors as a whole and not any one emphasis area. In 2018, undergraduate public health majors were 69% female, 75% US citizen, and 100% (99.8%) members of the Church of Jesus Christ of Latter-day Saints (see <u>Appendix 15</u>).

Undergraduate Public Health programs are open-enrollment. All comers are welcome without regard to their demographic background. As such, no recruitment efforts are planned at the undergraduate level.

Other Issues

Discuss any other issues pertinent to this program and students served therein.

There are no additional issues to discuss.

2. BS in Public Health – Health Promotion Emphasis

Learning Outcome Updates

After reviewing the program's Learning Outcomes and Assessment table, discuss any issues that need to be updated. Include the updates in the final version of the alignment tables for each program.

For the four health promotion emphasis learning outcomes, direct and indirect measures have been established and data collected for a number of years. As such, no updates are needed to the current learning outcomes alignment table. Following our most recent academic year review of the direct and indirect assessment data for the health promotion emphasis, several actions taken or planned have been noted. The complete alignment table for the BS in Public Health – Health Promotion Emphasis is found in <u>Appendix 16</u>.

System for Assessment of Learning Outcomes

Discuss your system for assessment of learning outcomes. What processes do you have in place for regular program assessment?

Our system for assessment of health promotion emphasis learning outcomes includes:

- Assessment of the health promotion emphasis learning outcomes is the primary responsibility of health promotion coordinator (West) and faculty associated with the health promotion emphasis. Assessment findings are reviewed annually during emphasis area faculty meetings or at the annual faculty retreat.
- Assessments have been identified by the faculty for health promotion courses HLTH 335, HLTH 431, HLTH 434, HLTH 439, and HLTH 480 as direct measures of students' achievement of health promotion learning outcomes. The specific assessments linked to each learning outcome are listed in the Learning Outcomes and Assessments table for the health promotion emphasis in <u>learningoutcomes.byu.edu</u>.
- Targets for each assessment is that at least 80% of students score 80% or above.
- Data are collected by faculty every semester that the courses are offered and shared with Emily Eyre, our assessment coordinator.
- Conclusions are drawn based on the evidence. Actions are planned or taken based on conclusions.

During the 3-4 years prior to this self-study the health promotion emphasis operated with the same set of health promotion-specific learning outcomes and similar assessments, with minor differences. During the most recent calendar year (2018), 100% of the learning outcomes were achieved. At the conclusion of each semester faculty report students' progress toward achieving learning outcomes in their respective classes to Emily Eyre. Emily compiles the data and produces a report for the faculty. Problem areas are discussed with the Department Chair.

Improvements

Discuss your use of assessment data for improvement in this academic program. What are some of the specific improvements that have been made as a result of your assessment of student learning outcomes?

Required courses in the health promotion emphasis were adjusted in the past year to address learning outcomes, national trends in the health promotion education, and accreditation expectations. These changes included:

- <u>Learning Outcomes</u>. Renaming and modifying learning outcomes for many of the key health promotion emphasis core courses/major-specific courses.
- <u>Pre-Requisites</u>. Establishing and enforcing pre-requisite courses in an effort to assist students to better sequence the curriculum.
- <u>Culminating Experience</u>. Modifying and updating the internship requirements, including where an internship can be completed and the requisite characteristics of an approved preceptor. Modifying HLTH 439 in order that it becomes the health promotion emphasis capstone course.
- <u>Electives</u>. Updating and adding to the list of elective courses.

Potential Issues

What are the present and future issues that might impact the continuation or adaptation of the program and related courses?

Externally, health is important to most societies. Domestically, health policy has been an ongoing focus in the United States and most recently with the passage and modifications of legislation such as the Patient Protection and Affordable Care Act (Obama Care). Through legislation such as this, debates continue on how best health can be achieved and maintained. As these debates continue, preparing students to help address important policy-related questions involving health is an important responsibility of health promotion faculty. As such, health promotion faculty will not only need to remain in tune with the national health policy trends but also help prepare students with the skills necessary to succeed in changing political and social environments. Of particular importance for health promotion is how to address the incidence and prevalence of chronic diseases, which have overtaken infectious diseases as the leading killers of Americans. Similarly, health promotion faculty will need to be nimble and adjust to emerging global health issues such as climate change and infectious disease pandemics.

Internally, a greater focus on inspiring and experiential learning has generated increased discussion about faculty course loads. Simultaneously, for the first time during the most recent spring semester, health promotion faculty reported lower enrollments in health promotion courses. While it is assumed that recent curricular changes to the public health major combined with increased spring/summer experiential learning opportunities are to blame, spring enrollment trends have also motivated a review of course offerings. The department chair in consultation with all department faculty is exploring the feasibility of moving away from a teaching load of five courses a year to four courses a year. For health promotion, this reduction could be made up by offering fewer spring/summer health promotion courses. The one-course annual release from didactic teaching would provide greater flexibility and involvement in experiential learning activities (e.g., study abroad, mentored research, etc.).

Trends

How have your unit's enrollment trends and program changed over the past five to seven years? Do these reflect trends in the discipline? If these trends continue, what adjustments will need to be made?

The discussion of "trends" in this section apply to health promotion emphasis only.

The health promotion emphasis enrollment has increased overall and somewhat steadily, although there have been modest dips (see Figure 6 and <u>Appendix 12</u>). Starting in Winter semester of 2013 enrollment was around 300. This continued until Winter semester 2016 when enrollment approached 400 for the first time. During the Winter semester of 2017 enrollment peaked at 428. There has been a modest reduction in enrollment during the past

couple of years. The reason for the reduction is not clear may relate to changes in the curriculum. We will monitor this in the coming semesters. In some respects, a slowing upward trend in enrollment is preferred as it allows the health promotion emphasis to manage teaching and student mentoring loads with existing faculty. The current health promotion faculty is able to manage the curricular needs with the assistance of a limited number of adjunct or part-time instructors. This would be true even with another small increase in enrollment. However, if the enrollment were to increase by 20-30% we would need to add new sections, most likely taught by adjunct or part-time instructors.

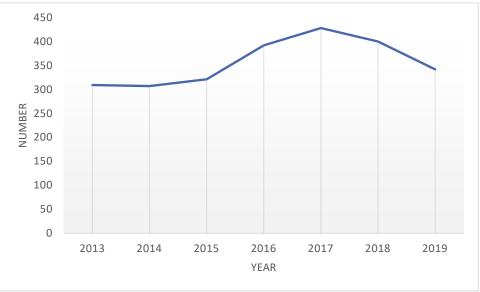


Figure 6: Health Promotion Emphasis Enrollment, 2013-2019

Student Satisfaction

Discuss student satisfaction as measured by student and alumni surveys, exit interviews, and external or internal program reviews.

A total of 77 health promotion emphasis students responded to the most recent senior survey (see <u>Appendix 17</u>). That is the greatest number of students in any of the years since 2013, the first year that data were made available to us. This larger number is probably attributable to the increased enrollment numbers. Highlights of the positive feedback include that approximately half of the students in the time period since the previous unit review have reported at least some level of working with a faculty member outside of class. There has been a slight upward trend from 2013 to 2018. It is not possible to conclude that every student had at least an opportunity to work on a faculty-led research project, but it seems encouraging that almost half reported actually working with a faculty member outside of class. Indeed, during the 2018 calendar year, more than half of the Health Promotion faculty published an article that included a student a co-author. The same data are not available for presentations, but it is even more common to include students on presentations as compared to publications. Most graduating students also report favorable ratings of their BYU experience, being aware of the program's learning outcomes, and feeling that the program helped them to achieve the learning outcomes.

Perhaps less positive, since 2013, only 57%, 60%, 64%, 63% and 49% report that they would select the same major if given the opportunity to choose again. It is not possible to compare these opinions with the university-wide data, but the values are comparable to the other emphasis areas in the department. It nevertheless suggests an opportunity for improvement. One major improvement could include efforts related to employment. There has been a slow and steady decline in the percentage of graduating students that expect to find a job in a related field. The employment outlook may influence attitudes and perceptions about the value of the degree program. This is partly confirmed by only 34% of alumni at year 3 working in a related field (see <u>Appendix 18</u>). Again, this is similar to the other department emphases.

In summary, graduating students and alumni have some concerns about the health promotion emphasis, but still, favorably rate the program generally and appear happy overall about their experience.

Demographic Trends

Taking into consideration demographic trends of the program's students over the last five years, what are your unit's plans and processes for admission and recruitment? How could they be improved?

These data are not specific to the health promotion emphasis. Nevertheless, there is no reason to believe that our students' demographics differ from those of the larger public health undergraduate student body. It is, therefore, not surprising that most of our students are members of the Church of Jesus Christ of Latter-Day Saints, US citizens, and female. The first two, church membership and citizenship largely mirror university trends. Furthermore, nationally, health promotion (and public health generally) is a female-dominant degree program. We continue to welcome students from diverse backgrounds and feel that foreign-born students have a natural affinity to health promotion given the emphasis on global health issues.

Other Issues

Discuss any other issues pertinent to this program and students served therein.

There are no additional issues to discuss.

3. BS in Public Health – Epidemiology Emphasis

Learning Outcome Updates

After reviewing the program's Learning Outcomes and Assessment table, discuss any issues that need to be updated. Include the updates in the final version of the alignment tables for each program.

The 2018-2019 academic year was the first opportunity to assess the learning outcomes associated with the revised curriculum. Several important changes, occurred during this period. Additional sections of HLTH 440 and HLTH 447 were added, two new courses HLTH 449 and HLTH 493 were created and changes were made to pre-requisties (e.g. 440 is now required before 447). Initial review of the alignment tables indicates that there is a need to improve for learning outcomes related to Study Designs and Data Analysis. The epidemiology faculty will meet during fall semester 2019 to assess ways to:

1) Standardize content/assessments across instructors of the same course

2) Evaluate and adjust (if needed) the content/assessments for HLTH 449.

It is possible that failure to meet learning outcomes, in 447 and 449 may be related to changes in the curriculum. Specifically, in the first year of the curriculum many students in HLTH 449 were taking the course along with pre-requisites. In subsequent offerings we expect students will have completed the pre-requisites prior to enrollment and therefore be better able to meet the learning outcomes.

The complete alignment table for the BS in Public Health – Epidemiology Emphasis is found in Appendix 19.

System for Assessment of Learning Outcomes

Discuss your system for assessment of learning outcomes. What processes do you have in place for regular program assessment?

Our system for assessment of epidemiology emphasis learning outcomes includes:

- Assessment of the epidemiology emphasis learning outcomes is the primary responsibility of epidemiology coordinator (Magnusson) and faculty associated with the epidemiology emphasis. Assessment findings are reviewed annually during emphasis area faculty meetings or at the annual faculty retreat.
- Assessments have been identified by the faculty for epidemiology courses HLTH 440, HLTH 447, HLTH 449, HLTH 493 as direct measures of students' achievement of epidemiology learning outcomes. The specific assessments linked to each learning outcome are listed in the Learning Outcomes and Assessments table for the epidemiology emphasis in <u>learningoutcomes.byu.edu</u>.
- Targets for each course/assessment listed above is that at least 80% of students in the class receive a passing grade Data are collected by faculty every semester that the courses are offered and shared with Emily Eyre, our assessment coordinator.
- Conclusions are drawn based on the evidence. Actions are planned or taken based on conclusions.

Improvements

Discuss your use of assessment data for improvement in this academic program. What are some of the specific improvements that have been made as a result of your assessment of student learning outcomes?

Courses required for the epidemiology emphasis were added or modified along with the 2018 curriculum redesign. These changes were motivated by updated learning outcomes, national trends in public health, and accreditation expectations. These changes included:

- Learning Outcomes Learning outcomes are now specified for each emphasis-specific course.
- Pre-Requisites Establishing and enforcing pre-requisite courses in an effort to assist students to better sequence the curriculum.
- Culminating Experience A capstone course was added to the epidemiology emphasis. Course outcomes include developing an epidemiologic research question and corresponding hypotheses; conducting a systematic review of the published literature relevant to their research question; writing a proposal outlining their background and rationale, research question, source of data, and data analysis plan; performing a quantitative data analysis; and writing a structured paper reflecting their overall project.
- Electives The list of elective courses have been revised to add additional options and remove options that do not support the learning outcomes for the emphasis.

Potential Issues

What are the present and future issues that might impact the continuation or adaptation of the program and related courses?

CEPH, the accrediting body for public health, has recently issued new learning outcomes. As we approach reaccreditation in 2023, these changes may require additional curricular changes

Relative to the other emphases in the BS in Public Health, the epidemiology emphasis has low enrollment. This low enrollment makes it difficult to justify needs for additional faculty, despite the large number of emphasis specific (HLTH 345, 440, 447, 449, 493) and core (HLTH 313) classes the epidemiology faculty teach. At present we have two full time faculty (Magnusson, Merrill) whose teaching loads are dedicated to epidemiology courses. Two additional faculty (Thacker, Chaney) teach 1/2 their load in epidemiology.

Additionally, the low enrollment means that we can only justify teaching emphasis specific courses (345, 449, 493) once per year. Other emphasis specific courses (440 & 447) are also required in the HS emphasis and thus offered twice per year. Offering 3 courses which build upon each other only once per year requires careful course sequencing and may delay graduation for students who declare their major late. Inability to graduate in a timely fashion may ultimately result in reduced enrollment.

Trends

How have your unit's enrollment trends and program changed over the past five to seven years? Do these reflect trends in the discipline? If these trends continue, what adjustments will need to be made?

The discussion of "trends" in this section apply to epidemiology emphasis only.

Enrollment numbers in the epidemiology emphasis have been identified for the years 2013 through 2019 (see Figure 7 and <u>Appendix 12</u>). This emphasis is one of the smaller emphases in the BS in Public Health with enrollment slightly above the environmental/occupational health emphasis. Enrollment increased from 2013 - 2016 and has declined slightly since then. Current enrollment numbers are comparable to 2013 and 2014. Little effort has been made to recruit more students beyond our introduction to public health course. With the new curriculum, changes in enrollment are expected, but difficult to predict.

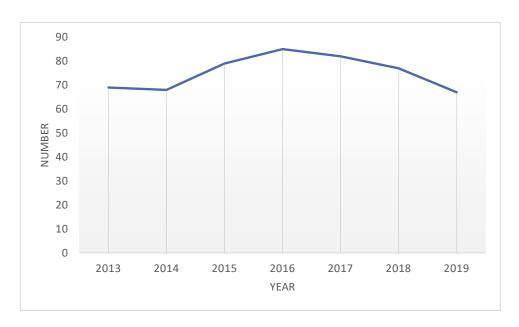


Figure 7: Epidemiology Emphasis Enrollment, 2013-2019

Campus Connections

Does your unit have any connections with other degree programs on campus? If so, discuss those relationships.

We do not currently have any formal relationships with other programs, though we do train students from other majors from time to time. Our students will also seek elective credit in other majors.

Student Satisfaction

Discuss student satisfaction as measured by student and alumni surveys, exit interviews, and external or internal program reviews.

A total of 15 epidemiology emphasis students responded to the most recent senior survey (see <u>Appendix 20</u>). Based on this survey, 27% were employed full time in a job related to their major field, 13% were employed full time in a job not related to their major field, and 33% were pursuing graduate or professional degrees. Students seemed satisfied with their experience in the epidemiology emphasis, with 80% saying if they were starting over they would choose the same major. Only 47% were aware of the expected learning outcomes for the major. However, of these students, 71% agreed that their academic experience helped them to achieve the expected learning outcomes. Approximately 60% of students indicated that they had worked regularly with a faculty member outside of class.

Areas to improve would be to make the students better aware of the learning outcomes for the major. In addition, opportunities to work with faculty outside the classroom is valuable for many students and faculty. Consideration will be given to a better understanding of why many students do not have a faculty mentoring opportunity.

The epidemiology alumni survey was completed by 13 students in the most recent cohort year (see <u>Appendix 21</u>). Approximately 38% were employed full time in their major field and 31% were employed full time outside their major field. Of four responses to the question about how effectively their educational experience at BYU prepare them for their current job, 75% said "quite well" and 25% said, "very well." Of five students who went on for further schooling, 100% said their BYU experience prepared them "effectively" or "very effectively" for graduate school.

Demographic Trends

Taking into consideration demographic trends of the program's students over the last five years, what are your unit's plans and processes for admission and recruitment? How could they be improved?

Undergraduate degrees awarded have declined in each of the emphasis areas in the Department of Public Health (<u>Appendix 11</u>). The number of students awarded undergraduate degrees is lower in epidemiology than in health promotion or health science, and similar to environmental/occupational health. Some of the declines may be due to changes in the curriculum. As we adjust to the new courses, we will be able to better evaluate ideal numbers for the epidemiology emphasis. Recruiting efforts will be made accordingly.

Other Issues

Discuss any other issues pertinent to this program and students served therein.

There are no additional issues to discuss.

4. BS in Public Health – Environmental/Occupational Health Emphasis Learning Outcome Updates

After reviewing the program's Learning Outcomes and Assessment table, discuss any issues that need to be updated. Include the updates in the final version of the alignment tables for each program.

For the three environmental/occupational health emphasis learning outcomes, new classes need to be added. HLTH 428 and 429 will be added to the first two learning outcomes along with evidence of learning for those two classes. HLTH 426 will be added to the third learning outcome. A new metric will be added to the third learning outcome for HLTH 428 covering ethics scenarios in case studies.

The complete alignment table for the BS in Public Health – Environmental/Occupational Health Emphasis is found in <u>Appendix 22</u>.

System for Assessment of Learning Outcomes

Discuss your system for assessment of learning outcomes. What processes do you have in place for regular program assessment?

Our system for assessment of environmental/occupational health emphasis learning outcomes includes:

- Assessment of the environmental/occupational health emphasis learning outcomes is the primary responsibility of environmental/occupational health coordinator (Thygerson) and faculty associated with the environmental/occupational health emphasis. Assessment findings are reviewed annually during emphasis area faculty meetings or at the annual faculty retreat.
- Assessments have been identified by the faculty for environmental/occupational health courses HLTH 322, HLTH 324, HLTH 426, HLTH 428, and HLTH 429 as direct measures of students' achievement of environmental/occupational health learning outcomes. The specific assessments linked to each learning outcome are listed in the Learning Outcomes and Assessments table for the environmental/occupational health emphasis in learningoutcomes.byu.edu.
- Targets for each course/assessment listed above is that at least 75% of students in the class receive a passing grade Data are collected by faculty every semester that the courses are offered and shared with Emily Eyre, our assessment coordinator.
- Conclusions are drawn based on the evidence. Actions are planned or taken based on conclusions.

Improvements

Discuss your use of assessment data for improvement in this academic program. What are some of the specific improvements that have been made as a result of your assessment of student learning outcomes?

An improvement made was to add a specific metric for environmental/occupational health ethics and moral code of conduct. A specific question in final exams and in case studies provides the evidence of whether students are learning about ethics and moral codes of conduct. These questions and case studies were instituted as a result of the current state of environmental/occupational health practice.

A new course (HLTH 429) began as a result of analyzing our assessment data. Students need more time for the synthesis of importance experiential learning activities provided in the first lab-based course (HLTH 428). The result is a second lab-based course offered winter semester.

Potential Issues

What are the present and future issues that might impact the continuation or adaptation of the program and related courses?

With the current strong economy, careers in environmental/occupational health are readily available in the private and public sectors. The demand for qualified graduates of degree programs is high. However, this career field is still not highly recognized and the need to market the career path and degree program here at BYU is needed. We feel the current courses in the emphasis prepare the student to work immediately in this field or continue to graduate school. Our faculty and staff are working to increase enrollment in the emphasis through several strategies and increasing enrollment in this emphasis should receive attention from the department and college.

Trends

How have your unit's enrollment trends and program changed over the past five to seven years? Do these reflect trends in the discipline? If these trends continue, what adjustments will need to be made?

A decline in enrollment numbers in the environmental/occupational health emphasis has been observed (see Figure 8 and <u>Appendix 12</u>). We are trying to determine the root causes of the downward trend. However, efforts to recruit through several means are being made including a campus-wide advertising campaign starting Fall 2019. Even with the downward trend, the emphasis remains strong in terms of the number of graduates actively working in the field. If current trends continue, curricular changes may need to be made to attract more students.

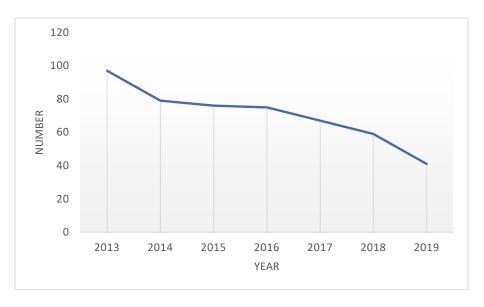


Figure 8: Environmental/Occupational Health Emphasis Enrollment, 2013-2019

Student Satisfaction

BYU DEPARTMENT OF PUBLIC HEALTH – UNIT REVIEW 2019

II. Programs

Discuss student satisfaction as measured by student and alumni surveys, exit interviews, and external or internal program reviews.

A total of 9 environmental/occupational health emphasis students responded to the most recent senior survey (see <u>Appendix 23</u>). Based on this survey, students seem satisfied with their experience in the major and how it prepared them for a career in environmental/occupational health. Over the last five years, between 39% and 46% indicated they anticipate to be working full-time in a career linked to their major. Between 23% and 31% expect to be in graduate school. Between 85% and 94% of students indicated that their educational experience helped them achieve the learning outcomes of the major.

Areas to improve would be more opportunities to work with faculty outside the classroom. Between 48% and 56% of students did not work with a faculty member outside of the classroom in a mentoring atmosphere.

A total of 13 environmental/occupational health emphasis students responded to the most recent alumni questionnaire (see <u>Appendix 24</u>). For students preparing for graduate school, between 91% and 100% acknowledge that BYU and the environmental/occupational health emphasis prepared them effectively or very effectively for graduate school.

Demographic Trends

Taking into consideration demographic trends of the program's students over the last five years, what are your unit's plans and processes for admission and recruitment? How could they be improved?

Demographic trends in the environmental/occupational health emphasis follow the trends of the overall major. We do not have any specific plans or processes to improve or change recruitment based on demographic trends.

Other Issues

Discuss any other issues pertinent to this program and students served therein.

Removing HLTH 322 (Environmental Health) as a major core course may have contributed to the downward enrollment trend we are currently seeing in the Environmental and Occupational Emphasis. This course was a major recruiting tool for students to learn more about the environmental/occupational health emphasis and declare this emphasis.

5. BS in Public Health – Health Science Emphasis

Learning Outcome Updates

After reviewing the program's Learning Outcomes and Assessment table, discuss any issues that need to be updated. Include the updates in the final version of Table 2 for each program.

We have updated the Learning Outcomes and Assessments table in learningoutcomes.byu.edu with 5 new emphasis-level learning outcomes that correspond to the new Health Science emphasis curriculum that we initiated in 2018. The five learning outcomes address (1) cultural competency, (2) vulnerable and marginalized

populations, (3) upstream approach to health, (4) social determinants of health, and (5) statistical methods and software.

In line with the new emphasis-specific learning outcomes, we are now using an updated set of Health Science emphasis-specific required courses: HLTH 423 (new course), HLTH 425 (new course), HLTH 440 (existing course, but newly required for Health Science emphasis), HLTH 447 (existing course), and HLTH 496R (existing internship). The two new courses expose students to intersections of public health with primary care (HLTH 423) and to working with vulnerable and diverse populations (HLTH 425).

The complete alignment table for the BS in Public Health – Health Science is found in <u>Appendix 25</u>.

System for Assessment of Learning Outcomes

Discuss your system for assessment of learning outcomes. What processes do you have in place for regular program assessment?

Our system for assessment of health science emphasis learning outcomes includes:

- Assessment of the health science emphasis learning outcomes is the primary responsibility of health science coordinator (Thacker) and faculty associated with the health promotion emphasis. Assessment findings are reviewed annually during emphasis area faculty meetings or at the annual faculty retreat.
- Assessments have been identified by the faculty for health science courses HLTH 423, HLTH 425, HLTH 440, HLTH 447, and HLTH 496R as direct measures of students' achievement of health science learning outcomes. The specific assessments linked to each learning outcome are listed in the Learning Outcomes and Assessments table for the health science emphasis in learningoutcomes.byu.edu.
- Targets for each course/assessment listed above is that at least 75% of students in the class receive a passing grade Data are collected by faculty every semester that the courses are offered and shared with Emily Eyre, our assessment coordinator.
- Conclusions are drawn based on the evidence. Actions are planned or taken based on conclusions.

Improvements

Discuss your use of assessment data for improvement in this academic program. What are some of the specific improvements that have been made as a result of your assessment of student learning outcomes?

In Fall 2018 and Winter 2019 we launched multiple improvements to the health science emphasis. These improvements were based on the bigger-picture overhaul of our entire curriculum, both for the public health core and for the health science emphasis. Specific improvements have been made to the learning outcomes themselves and to the way they are being assessed.

Specific improvements launched in Fall 2018/Winter 2019 and currently being implemented:

- Developed new emphasis-specific learning outcomes. We did this in Aug 2018 and Emily Eyre entered them into learningoutcomes.byu.edu by Dec 2018.
- Implemented a new set of health science emphasis-specific courses: HLTH 423 (new course), HLTH 425 (new course), HLTH 440 (existing course but newly required in HS), HLTH 447 (existing course), and 496R (existing internship). We started this in Fall 2018.

II. Programs

- Started using assessments from the new set of health science courses to measure health science program learning outcomes. We started this in Fall 2018.
- Redefined types and scope of HTH 496R internships for health science based on the new learning outcomes. Work occurred during Feb/Mar 2019 and all the updates have been incorporated into the latest internship manual by Stephanie Lutz. Health science emphasis students are now required to report when they propose an internship on how they think their internship will align with the current health science program learning outcomes. Alignment with at least 1 of the 5 learning outcomes is now a requirement. In addition, health science faculty review of the first stage of internship approval has been implemented, which is the internship site pre-approval (Form A in the internship approval process). This way, health science faculty are now reviewing internship alignment with the program learning outcomes, rather than the internship coordinator (Lutz).
- Provided examples of various types of internships that align with current health science learning outcomes. Work occurred during in Feb/Mar 2019 by including a lengthy list of examples in the internship manual. All health science faculty contributed examples.
- Gathered and tracked experiences and feedback from health science students and faculty regarding the new curriculum. These assessment activities are ongoing and need to be better systematized.

Potential Issues

What are the present and future issues that might impact the continuation or adaptation of the program and related courses?

We are currently preparing a proposal to further adapt the health science emphasis as follows:

- Stop using HLTH 496R internship as the culminating experience, and instead make HLTH 496R internship an elective experience, with fewer prerequisites. This change will make internships more appealing to health science students earlier in their program, and allow internships to potentially be at more of an exploratory level rather than a culminating level.
- Start using HLTH 423 as the culminating experience, making it a capstone course with more prerequisites than it currently has. This change will lead to health science students coming into HLTH 423 better prepared and closer to the end of their program, and allow HLTH 423 to serve better as a bridge between college and future activities for the students.

Our intention is to implement the switch to HLTH 496R becoming elective and HLTH 423 becoming capstone in Fall 2020, pending approval from college and university curriculum committees. The issue we are addressing with this change is that a majority of health science students go on to graduate school, medical school, or other advanced training immediately out of college, rather than going into the workforce. So, a required internship as a culminating experience was not meeting the needs of many students. We anticipate that HLTH 423, which focuses on the integration of public health with primary care, will better meet students' needs as a capstone course / culminating experience. And retaining the HLTH 496R internship as an option will still preserve flexibility for HS students who desire an internship as part of their training.

Another issue is that we have only offered HLTH 425 as a Fall semester class, which limits students' flexibility in completing all required health science courses. We plan to implement HLTH 425 as a Winter class in Winter 2020 and have it officially listed as Fall and Winter in the BYU course catalog beginning in Fall 2020.

Trends

How have your unit's enrollment trends and program changed over the past five to seven years? Do these reflect trends in the discipline? If these trends continue, what adjustments will need to be made?

Enrollment in the health science emphasis has steadily grown since 2013 (see Figure 9 and <u>Appendix 12</u>). If enrollment continues to increase, changes will not necessarily need to be made. However, one concern is the fact that the health science emphasis has historically operated without any dedicated health science-specific faculty. Courses from other emphasis areas and majors were used to constitute the health science emphasis core. To date, two primary faculty are dedicated to the health science emphasis (Novilla, Page), both teaching new health science-specific courses (HLTH 423, HLTH 425). One public health faculty member who teaches in the major core and in the Health Science and Epidemiology emphasis has agreed to serve as the health science emphasis coordinator (Thacker). With limited health science-specific faculty resources and continued growth in the emphasis, discussions will need to occur as to how to accommodate students in health science emphasis core courses. Growth may have to involve hiring adjunct faculty or moving faculty from other emphasis areas.

Most recent changes reported above reflect trends in the discipline, in which the integration of public health with other sectors is increasingly important.

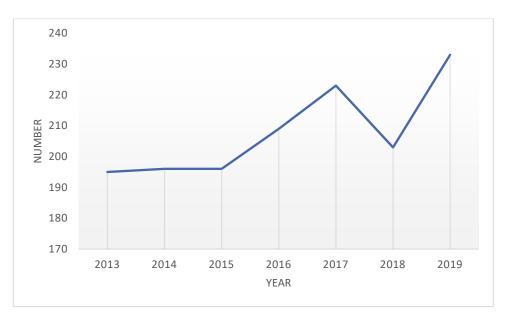


Figure 9: Health Science Emphasis Enrollment, 2013-2019

Student Satisfaction

Discuss student satisfaction as measured by student and alumni surveys, exit interviews, and external or internal program reviews.

A total of 17 health science emphasis student responded to the most recent senior survey (see <u>Appendix 26</u>). This is a low response rate, so the following results should be interpreted with caution. Of those 17 seniors, ten (59%) anticipated being employed during the first year after graduation and six (35%) anticipated being in graduate or professional school during the first year after graduation. This distribution of anticipated employment versus

further schooling differs from prior years, when the percentages anticipating graduate or professional school in the first year were higher (58% to 76%). In 2017-2018, over 80% of seniors rated their overall educational experience at BYU as "Good" or "Excellent." However, only 46% indicated that they would choose to graduate with the same major if they were starting their college career over. The percentage of senior survey respondents indicating they would choose the same major declined from 2013-2014 to 2017-2018.

We believe the many recent changes we have made to the Health Science major will lead to higher student satisfaction going forward, because we have addressed issues that we identified as leading to dissatisfaction (as described above).

A total of 19 health science emphasis students responded to the most recent alumni questionnaire (see <u>Appendix</u> <u>27</u>). This is a low response rate, so the following results should be interpreted with caution. Of those 19 alumni, 8 (42%) were employed and 9 (47%) were full-time students (presumably in graduate or professional schools). 94% (all but one student) indicated that their entire educational experience at BYU was "Good" or "Excellent." However, only 47% indicated they would select the same major if they were to start college over. Responses indicated that BYU prepared most alumni well for their current jobs or graduate school.

As part of our process of creating our new curriculum, focus groups were held with health science emphasis students and regarding their experiences and ideas for improvements. Recent changes made the emphasis were supported by focus group comments. The primary recommendation was a shift in the health science emphasis away from purely health promotion cores and towards a stronger connection with healthcare and data management (HLTH 440). Additional changes responded to comments surrounding the internship.

Demographic Trends

Taking into consideration demographic trends of the program's students over the last five years, what are your unit's plans and processes for admission and recruitment? How could they be improved?

We do not have data for demographic trends specific to the Health Science emphasis. We assume the demographics for this emphasis are similar to those for Public Health students overall.

Currently, for the health science emphasis, we have no plans to do anything special regarding admission or recruitment. We are an open-enrollment program.

Other Issues

Discuss any other issues pertinent to this program and students served therein.

There are no additional issues to discuss.

6. Masters of Public Health (MPH)

Learning Outcome Updates

After reviewing the program's Learning Outcomes and Assessment table, discuss any issues that need to be updated. Include the updates in the final version of the alignment tables for each program.

We do not currently have any urgent issues needing to be updated but are reviewing all our learning outcomes and assessments in an effort to determine if our curriculum could be further improved.

The complete alignment table for the MPH program is found in <u>Appendix 28</u>.

System for Assessment of Learning Outcomes

Discuss your system for assessment of learning outcomes. What processes do you have in place for regular program assessment?

The MPH program has developed a systematic process for assessing learning outcomes (see Figure 10) that includes attention to direct and indirect measures such as:

- 1. Course assessments
- 2. Student self-assessments
- 3. Fieldwork agency assessments

Students complete three self-assessments administered through email. These assessments include:

- Pre-Field Work Self-Assessment
- Post-Field Work Self-Assessment
- Final Self-Assessment

At the end of the program of study, students have the opportunity to complete the final self-assessment of the eight learning outcomes. The assessment provides valuable information as to whether the competencies have been attained and allows students to note significant improvements that have been achieved.

Assessment of the MPH learning outcomes is the primary responsibility of the MPH Curriculum and Learning Committee. This committee is led by the MPH director (Crookston) and includes select graduate faculty from the department (Crandall, Beard, Glenn) and an MPH student. Data from indirect and direct measures are collected each year with help from the MPH program manager (Riggs) and the department assessment coordinator (Eyre). These data are reviewed annually as part of the MPH Curriculum and Learning Committee or in an annual faculty retreat. Conclusions are drawn based on the evidence with actions planned or taken based on conclusions. All recommended actions or plans are presented to faculty for feedback and approval during department faculty meetings.

II. Programs

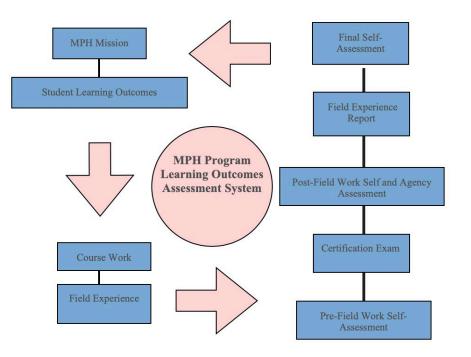


Figure 10: MPH Learning Outcomes Assessment System

Improvements

Discuss your use of assessment data for improvement in this academic program. What are some of the specific improvements that have been made as a result of your assessment of student learning outcomes?

Several changes have been made to the MPH program as a result of reviewing assessment data. These changes include:

- <u>Oral Exam</u> Historically the MPH program required that all students complete a research project as part of their culminating experience in the program. Several years ago, the project was replaced by an oral exam delivered by the graduate committee of each MPH student. More recently, a review of assessment data prompted additional discussion among the MPH Curriculum and Learning Committee as to the best culminating experience for graduate students who intend to go directly into practice. While the field experience remained a program requirement (HLTH 688R), the oral exam was dropped in favor of a public health capstone course (HLTH 690). The rationale for the capstone was that it would provide students with an experiential learning opportunity that was consistent in quality, rigor, and expectation across all graduate students.
- <u>Faculty Advisor</u> Changes to the MPH culminating experience made graduate committees less useful. As such, the MPH Curriculum and Learning Committee received approval to assign one faculty advisor and one reader to each MPH student. The role of the faculty advisor is to: (1) develop and approve a plan of study, (2) review and approve, a field experience and evaluate the final report, (3) complete a bi-annual review of student progress, (4) review final graduation "checklist" requirements, and (5) consult on future employment opportunities.

• <u>Certified in Public Health (CPH) Exam</u> – In an effort better access the extent to which MPH student were obtaining MPH core competencies and learning outcomes, the CPH exam was instituted as a direct measure. Passing the CPH is a requirement of all MPH students for graduation.

Potential Issues

What are the present and future issues that might impact the continuation or adaptation of the program and related courses?

The issue of the most impact on the MPH program is accreditation expectations established by CEPH. In 2016, CEPH updated their accreditation criteria (see: <u>https://media.ceph.org/wp_assets/2016.Criteria.pdf</u>). All accredited programs were required to demonstrate compliance with these new criteria by submitting evidence through a reporting process. MPH faculty reviewed each new criteria expectation and modified the curriculum as appropriate to ensure that the required MPH foundational skills and competencies were being covered.

Findings from the CEPH assessment of MPH program compliance revealed that the reviewer could not verify one compliance item related to systems thinking. Faculty have made additional adjustments to the curriculum and expect to be in complete compliance Fall semester 2019.

Trends

How have your unit's enrollment trends and the program changed over the past five to seven years? Do these reflect trends in the discipline? If these trends continue, what adjustments will need to be made?

Master of Public Health degrees awarded for five academic years beginning 2013—2014 and ending in 2018—2019 are found in <u>Appendix 29</u>. Overall enrollment in the MPH program was highest in 2014 with 31 students (see <u>Appendix 30</u>). Since that time, enrollment has ranged between 23 and 26 students. The MPH has admitted the largest cohort ever during the 2019—2020 academic year (N=23).

Student Satisfaction

Discuss student satisfaction as measured by student and alumni surveys, exit interviews, and external or internal program reviews.

Data collected by the department from 2013—2019 using the MPH Exit Survey revealed that graduate students are generally satisfied with the education they are receiving through the MPH program (see <u>Appendix 31</u>). Of the graduating students responding (N=104), the following was reported:

- 95% rated professional training received in the department as good to exceptional.
- 98% rated the quality of teaching in the program as good or exceptional.
- 91% rated the quality of advising as good or exceptional.

The MPH program has made some positive adjustments in response to the 2017 alumni survey collected by Institutional Assessment and Analysis (see <u>Appendix 32</u>). In the survey, graduates expressed a strong need for better variety in professors teaching courses. As a result, the program has incorporated the following:

• New faculty hires with new ideas.

II. Programs

- Team teaching among junior and senior faculty members.
- Department faculty member rotation into teaching graduate courses.

This has proven to be successful and a benefit to both MPH students and faculty members.

Demographic Trends

Taking into consideration demographic trends of the program's students over the last five years, what are your unit's plans and processes for admission and recruitment? How could they be improved?

- <u>Demographic Trends</u>. Demographic trends of MPH students in the program have stayed fairly consistent over the past 5 years. The percentage of female students has ranged from 84% in 2014 to 76% in 2019. Additionally, the percentage of US Citizens in the program has stayed consistent at 80-90%.
- <u>Process for Admission</u>. The MPH Admissions Committee has recently reviewed admission criteria, paying special attention to diversity and professional experience. Professional experience criteria have been adjusted to provide better clarity for faculty scoring student applications. Similar to other programs, we give applicants with professional public health or related area experience higher scores on the professional portion of the applicant scoring rubric.
- <u>Process for Recruitment</u>. The program director participates in the Utah Graduate Student Fairs on an annual basis in an effort to attract students to apply to the program. Additional considerations for recruitment have included student, alumni and faculty recruiters.

Student Demand

For graduate programs: What kind of depth of study and level of demand on student intellectual and creative capacities is required? Do you have adequate faculty members with graduate status to support this program?

The graduate MPH program offers a demanding curriculum of both content and process oriented courses. Process oriented courses help students develop the necessary skills to be successful in public health practice. These courses include but are not limited to HLTH 602: Principles of Epidemiology, HLTH 625: Population-Based Health Promotion Interventions, HLTH 612: Program Planning and Evaluation, HLTH 604: Principles of Biostatics, and HLTH 618: Survey and Research Methods. Course that are largely content oriented include HLTH 600: Foundations of Public Health and Health Promotion, HLTH 619: Infectious and Chronic Disease Prevention, and HLTH 606: Environmental Health Science.

The culminating experiences for the program includes: (1) a 300-hour internship (HLTH 688R: Field Experience), (2) completion of a capstone project (HLTH 690: Public Health Capstone), and completion of the Certified in Public Health (CPH) exam. Taken together, didactic coursework and culminating experiences provide graduate students with rigorous experiences that challenge them.

All faculty members in department have graduate faculty status and are assigned advising responsibilities by the MPH director (Crookston). In addition, the MPH director is the only faculty member teaches more than one course in the graduate curriculum (HLTH 600 and HLTH 690). This arrangement allow more faculty to be involved in the program. In one case, HLTH 619, two faculty (Novilla, Sloan) are team teaching the course.

Other Issues

Discuss any other issues pertinent to this program and students served therein.

No additional issues to discuss.

Teaching activities in the department are consistently improving. As noted above, a full undergraduate curriculum review and revision was implemented in Fall semester 2018. The revisions aligned us with national trends in public health education and new accreditation requirements while more fully integrating and sequencing course offerings. The new curriculum focuses on a mix of content and skills-based courses and experiences that increase students' technical knowledge, critical thinking, and ability to analyze data and communicate findings to a broad audience.

Make-up and Resources

Discuss the make-up of your unit's faculty, and the resources available for teaching. What needs should be addressed moving forward?

There were 20 full-time faculty in the department during the 2018—2019 academic year (see <u>Appendix 33</u>). Of these, 7 are female and 13 are male. We also have 14 adjunct faculty of which 12 are female and 7 are male. All of our current full-time faculty either have CFS (n=14) or are on the CFS track (n=6). To help faculty develop teaching skills, we complete regular peer-teaching evaluations that are in alignment with CFS requirements.

Among those course sections not designated as "R", the full-time Public Health faculty taught 82 undergraduate and 11 graduate course sections in 2017-2018, compared to 63 and 12 in 2013-2014 (see <u>Appendix 34</u>). There

were 45 undergraduate sections and 16 graduate sections under "R"-designated courses taught by full-time faculty. <u>Appendix 35</u> demonstrates that there are just under 300 student credit hours per full-time faculty headcount in fall and winter semesters. Faculty are carrying an average of 11 course credit hours in the fall and winter semesters.

With the rapid growth of the public health program and the reduced course loads among faculty in administrative positions (one in the dean's office and two in upper administration), we rely on part-time faculty to teach sections the full-time faculty are unable to cover. Part-time instructors taught 23 undergraduate and one graduate non-"R" course in 2017-2018. They also taught three "R"-designated courses. Our faculty that are also full-time administrators still taught 10 "R" and 12 non-"R" courses in 2017-2018. Continuing to cover all sections of courses, especially in the health promotion emphasis, is a continual challenge.

The public health faculty have a variety of resources at the department, college, and university to support teaching. At the department level, we have access to an annual allotment of money for both teaching assistants and mentored research experiences. We frequently have students involved in active learning projects that require poster presentations. To respond



to the need, the department invested in a poster printer. This resource has been very useful as we prepare for class, and also for students presenting at conferences.

Graduate students are allowed to pursue mentored research experiences. Historically, few have chosen to do so outside of their fieldwork experiences. However, we anticipate a large increase in the number of graduate students in the program beginning in Fall 2019, so this may change going forward. The graduate students have access to designated office space for them to pursue their goals in both coursework and research.

Within the College of Life Sciences, we have been given 1,000 square foot designated teaching laboratory space specifically for environmental and occupational health courses. The laboratory includes a main open research area and two adjacent 95 square foot rooms. We also work in a second designated lab-bench space on the third floor of the life sciences building. We use this space to house basic research materials and to allow students to conduct mentored research without worrying if there is a class in the teaching laboratory. The Department continues to purchase equipment to create a state-of-the-art research laboratory within these spaces. The labs are further described under the section on Facilities and Resources.

We have access to LSB computer labs in which to teach analytical skills such as SAS programming and GIS, as well as communication skills such as creating infographics. These must be scheduled in advance as part of coursework. We also have a number of iPads and laptops to check out for particular teaching or research needs. When the LSB first opened, students, were able to use the computer labs for homework or support when a class was not being taught. This is no longer the case, as the College is not providing support staff in the labs anymore. Finding a space where students and TAs can meet and use the software is an area of potential improvement.

Additional funding for teaching or mentoring can be applied for by the faculty under two mechanisms. The first mechanism is a College Undergraduate Research Award (CURA). This is money sought to fund a student or group of students for a specific project. Students can request up to \$1500, with another \$1500 for supplies or travel. This new funding mechanism, which replaced the ORCA grants, has resulted in many more of our students being able to complete mentored research experiences. Whereas we previously only received a few ORCA awards each year, we received 17 CURA awards for 2019.

Another option for teaching funding is applying for a teaching enhancement grant (TEG) through the College. TEG awards are typically between \$5,000 and \$7,000, though a team of faculty can apply for up to \$10,000 to enhance teaching. In the last three years, we received eight TEG awards, with five of those in 2016.

Many of our faculty use resources at the Center for Teaching and Learning (CTL). They provide feedback on course design, assist in the development of online courses, and provide training. The faculty have reported positive experiences when working with CTL in the past.

Strengths and Challenges

What are the strengths and challenges of the unit's faculty (as a whole) in terms of citizenship, teaching and scholarship?

Service and citizenship responsibilities within the department are equally divided among faculty members. Pre-CFS faculty are excused from demanding or time-consuming citizenship assignments. To avoid having an excessive number of committees and subsequent assignments, ad hoc groups are formed to address the specific

needs within the department. Having said this, there are enough service opportunities within the department, college, and university for those needing to strengthen this aspect of their CV in preparation for CFS and/or promotion. Community partnerships are encouraged and considered to be meaningful citizenship contributions, especially when they help connect students to potential internships and job opportunities. Fewer faculty meetings in recent years has increased the effectiveness of these meetings and freed up time for faculty to meet with students during the 11:00 am hour when no classes are scheduled on campus.

Remaining challenges include articulating and valuing the contributions of smaller and irregular service opportunities, including guest lecturing in other classes, writing letters of recommendation, peer-review of manuscripts, and impromptu meetings with students to discuss pressing personal issues. Ongoing efforts to improve and clarify the department's rank and status document in regards to these informal citizenship activities is also considered a challenge.

The department makes great efforts at ensuring that teaching responsibilities are fair and equitable. New faculty are typically assigned a lighter teaching load to assist them in establishing a research trajectory and freeing up additional time for course preparations. After a year or two, all faculty not serving in administrative positions generally teach two classes during both Fall and Winter Semesters and one course during either Spring or Summer Term. The faculty has a broad set of professional and academic experience which generally aligns well with courses offered. Great efforts have been made to revise and align the department's core classes with national standards and accreditation requirements. Efforts have also been made to meet individual faculty member's course preferences, including teaching location, time and day of courses offered, preferred teaching approaches (online vs face-to-face), and desired class sizes. University support for teaching quality and improvement is primarily provided through the Center for Teaching and Learning and the New Faculty Seminar. Additional support is provided by groups such as BYU's Writing Across the Curriculum office. Within the department, new faculty are assigned a mentor and provided opportunities for peer evaluation of teaching.

As noted in the previous section, existing challenges related to teaching include the number of gifted teaching faculty unable to teach a regular load while serving in administrative positions at the department, college, and university level.

An emphasis has been placed on scholarship at the university, college, and department level. Faculty in the department have responded well and are productive individually and within informal research groups (see <u>Appendix 36</u>). More formal research collaborations appear increasingly productive within the department, with faculty from other departments, and with partners at the national and international levels. Including undergraduate and graduate students in all aspects of research is a priority among department faculty as is evident by a review of faculty CV's over the past several years. Faculty members bring various and valuable research skills, some more proficient in research design and others more skilled in data analysis. Increasing pressure and expectations related to external funding, and recent changes to internal funding, present emerging challenges to scholarship.

Performance Expectations and Evaluations

How helpful and pertinent is your unit's documentation and mentoring regarding performance expectations and criteria for faculty evaluation?

The department has several processes in place for documenting and mentoring performance expectations. These include formally assigned mentorship pairs for new/pre-CFS faculty; a robust Rank and Status document; and annual stewardship interviews with the Department Chair.

- <u>Mentorship Pairs</u>. All new or pre-CFS faculty are paired with a more senior member of the faculty, who serves as the mentoring chair. Typically, the senior faculty person is within the same emphasis area of the new/pre-CFS faculty member. The faculty mentor: (1) stays in regular contact with the faculty member and nurtures a professional relationship; (2) discusses annual progress towards rank and status; (3) assists with various questions, needs, and/or concerns relative to rank and status; and (4) serves as a coach, friend, advocate, role model, and as a teaching/research resource based on the professional needs of the pre-CFS faculty member. This mentor-mentee pairing provide pre-CFS faculty members with a support network for navigating and successfully completing their third and sixth-year reviews.
- <u>Rank and Status Document</u>. In addition to our mentorship structure, the department has a robust Rank and Status document. This document details the department's expectations on faculty teaching, scholarship, and citizenship. It also supplements the Rank and Status document of the College and the University. This policy is used to guide decisions on rank advancement and tenure. Selected criteria for teaching expectations include having two or more comprehensive peer reviews for each review period and concrete efforts to improve teaching that may include participation in teaching enhancement activities and workshops sponsored by the Center for Teaching and Learning. Selected criteria for scholarship include publishing two or more peerreviewed articles per year; being listed as the primary author on at least three peer-reviewed journal articles prior to CFS; with 10 peer-reviewed journal articles prior to CFS. Selected criteria for citizenship include serving on one state, regional, national or international professional association board; engaging students in a meaningful way in their learning; and participating in at least one school or community-based project that requires active and sustained participation.
- <u>Annual Stewardship Interviews</u>. The chair conducts yearly stewardship interviews with each faculty member to obtain feedback on performance; discuss department issues and potential solutions; ask about personal development leave, and to determine faculty teaching, research, mentoring, and/or resource needs. Prior to these interviews, the chair distributes a list of questions that will be discussed during the stewardship interview. Faculty members are encouraged to be prepared to answer these questions prior to their respective stewardship interview. They are also given the opportunity to discuss issues and needs that may not covered by these interview questions.

Five-to-Seven Year Staffing Plans

Elaborate on the unit's plans for faculty retirement and recruitment over the next five to seven years. In this discussion, reflect on the following questions:

- *How is the unit identifying, making and maintaining contact with, and increasing the pool of potential faculty members?*
- What are the salient professional and personal characteristics of potential faculty members the unit is interested in recruiting?

The department is interested in recruiting potential faculty members with a commitment to the mission of Brigham Young University and who hold a PhD or DrPH in public health or a closely-related field. Additionally, the department emphasizes recruiting potential faculty with a strong research track record, a research agenda related to one or more of the four academic emphases in the department (health promotion, health science, epidemiology, and environmental health), teaching experience or a demonstration of a commitment to teaching, and applicants who are student-centered and who will be likely to support inspired learning opportunities for students in their courses and research. Applicants who are members of The Church of Jesus Christ of Latter-day Saints are typically given priority.

When vacancies occur, the department can search its applicant tracker pool. This is comprised of the names, contact information, academic degrees, titles, and employment positions of alumni who are working toward or have received a Ph.D. The list also includes other professionals that department faculty meet at conferences and other professional gatherings. The applicant pool is maintained and updated using a Google spreadsheet entitled "Potential Faculty Applicant Pool." All department faculty have access to this spreadsheet and are encouraged to add potential contacts. All faculty are reminded to update this list regularly (at least annually). The department chair and other members of the faculty maintain frequent contact with many of the potential applicants.

To grow the department's applicant pool, the department encourages its students to aspire for higher education. Of the current faculty in the department, a total of 12 have earned an undergraduate or a graduate in the department. With continued support, we hope to expand the applicant pool for female and male faculty as well as from racially/ethnically diverse backgrounds. The department also conducts workshops on women in graduate school and in the workplace to encourage its female students. This particular effort aligns with the aim of the College of Life Sciences to increase its support for female students who want to attend graduate school given the female-to-male ratio of students who attend graduate school.

Decisions

How are decisions made in your unit regarding resources allocation, curricula, teaching and committee assignments, rank and status, recruiting and hiring, etc.?

Major resource allocations are primarily decided by entities outside the department such as the college and university. When departmental discretion is involved, decisions are led by the department chair (e.g., departmental equipment funds, private donations).

Curricular decisions involve recommendations from the undergraduate and graduate curriculum standing committees. Their recommendations are presented, discussed, amended, and voted on in faculty meeting. The

undergraduate curriculum committee is comprised of the faculty coordinators for each of the four academic emphases. Ad hoc committees may be created as needed (e.g., undergraduate curriculum revision in 2016-2017).

Teaching decisions depend heavily on the department chair. The chair determines the courses and sections taught by each faculty member each semester based on faculty expertise and gaps in teaching, which may include finding adjunct faculty as necessary. The chair prepares a draft of teaching assignments, which is discussed with each faculty member, after which, the department secretary assigns classrooms and days/times for each class. Historically, the department has been open to considering proposals for new classes. Faculty are all currently teaching at their required load so adjustments to other classes would be necessary to add new courses (e.g. increasing class sizes, dropping less popular electives, or hiring additional adjunct faculty).

Committee assignments are also initially drafted by the department chair. The chair presents the draft during the fall faculty retreat for ratification. Additional members may be added as needed throughout the year. Ad hoc committees are created during department faculty meetings and assignments are primarily on a volunteer basis.

Rank and status decisions involve all faculty with Continuing Faculty Status (CFS). The Department Rank and Status Committee, comprised of three tenured faculty members, reviews in detail the performance and accomplishments of the faculty candidate undergoing his/her third or sixth-year review.

The faculty candidate submits to the department his/her CFS packet that will be evaluated by the Rank and Status Committee and which the rest of the faculty can access and read. The department chair schedules a meeting attended by all the faculty except by the faculty candidate being reviewed. During this meeting, the chair of the Rank and Status Committee reads out loud the committee's letter, which details the committee's evaluation and recommendation, and then opens the meeting for a discussion. Following the discussion, tenured faculty members vote anonymously. The votes are tallied and included in the department's records to stand as the department's recommendation on advancement. The department chair writes and submits a separate letter as part of the CFS process.

Hiring decisions are also made as a department. As needed, the department creates a Faculty Search Committee that is typically comprised of three faculty members, one of which must be the representative of the academic emphasis of the open faculty position. The committee has some leeway on procedures. In the past, the Faculty Search Committee discussed and selected candidates for the first round of interviews that is held via Skype or Zoom. During this round, members of the Faculty Search Committee interviewed and scored each candidate based on a list of specific qualifications and hiring criteria mentioned in the job search announcement. The first round of interview was intended to select two to three finalists for an on-campus interview. The names of the finalists for an on-campus interview were submitted to the university for approval.

The on-campus interview is comprised of three parts: The first part is a teaching demonstration in an actual public health class in the department on a topic assigned by the department chair. The second part is a recorded faculty interview during which all faculty members can ask questions from the finalist. The recording of the interview is shared with faculty members who were not present during the interview. The third part is comprised of three separate personal interviews by the (1) department chair, (2) college dean and/or university associate academic vice presidents, and (3) Church official (general authority interview). The decision to hire a candidate is based on department vote. If the result of the first vote is not a supermajority the department chair allows for more discussion until a clear choice emerges, which is again placed to a vote for the final decision.

Other Issues

Discuss any other issues pertinent to the faculty of your unit.

NA

Are your unit's facilities, department resources, and university resources adequate for your needs? (Also consider any facilities that are available for joint use with other units.) This evaluation should include items such as those listed below:

Adequacy of Resources

Quality, level, breadth, quantity, and currency of library and information resources.

The library and information needs of students and faculty in the department are met through department resources (i.e. computers); LSB computer labs (LSB 2044 and LSB 2037); and the Harold B. Lee Library (HBLL).

The Department of Public Health has 20 laptops and 50 iPads that can be checked out by faculty and students. The Department also has a full practical/analytical environmental health laboratory (LSB 3031).

The College of Life Sciences maintains LSB computer labs and furnishes them with a variety of instructional materials (ex. teaching videos and reference materials) requested by faculty including specialized software and houses textbooks. These computer labs provide a meeting area for study groups or for taking make-up exams. The large computer lab in the LSB (2044) has 60 computers. LSB 2037, which is assigned to the department, has 8 computers.

The Harold B. Lee Library is the main library and informational resource for all university students and faculty. The HBLL allows student and faculty access to various journals for research. Mike Goates, the HBLL subject librarian for the College of Life Sciences, assists faculty in their research as a consultant and/or collaborator.

University Support

University support from or relationships with other relevant units across campus such as Graduate Studies, Undergraduate Education, Center for Teaching and Learning, David M. Kennedy Center, Maxwell Institute, Center for Language Studies, or any other units on campus.

The department has approximately 650 undergraduate public health majors. Because the department does not offer any general education classes, it does not receive financial support and services from the Undergraduate Education Office. However, the department receives various forms of support from several units across campus for faculty development, research, graduate program, and its global health internships and study abroad programs.

- <u>Center for Teaching and Learning (CTL)</u>. CTL offers faculty consultation and resources on course improvement, learning outcomes, course assessments, and guidance on the peer-review of teaching and student ratings. It sponsors workshops on course design, scholarly writing productivity, innovative teaching, research workshops on grant writing, and the Spring Seminar for new faculty members. Mike Johnson, a CTL consultant for the College of Life Sciences, offers personal assistance to faculty members in the college on teaching, student learning, course assessments, and course design.
- <u>Harold B. Lee Library (HBLL) Resources</u>. In addition to library resources, Mike Goates, the HBLL subject librarian for the College of Life Sciences, assists faculty in their research as a consultant and/or collaborator.

- <u>Graduate Studies Office</u>. The Graduate Studies Office provides the MPH Program with approximately \$110,000 per year for scholarships, research assistant wages, travel stipend, discretionary support (approximately \$25,000) to help with recruitment, supplies, and other program needs.
- <u>University and College Grant Support</u>. Faculty members have received support from the Charles Redd Center for Western Studies, Graduate Mentoring Grants from Graduate Studies, the College of Life Sciences Teaching Enhancement Grants, and other forms of support from other units. The Charles Redd Center for Western Studies provided Jim Johnston with \$12,000 to support a study of microorganisms in house dust from Utah homes using evaporative coolers compared to homes using central air conditioning. Five faculty members serve as faculty affiliates of the Gerontology Center (Barnes, Beard, Merrill, Novilla, and Thacker), two of whom (Merrill, Thacker) serve on the Gerontology Committee.

The department has worked with the David M. Kennedy Center to direct global health internships/study abroad programs over the years. The David M. Kennedy Center provides international internships and field experiences for BYU students. It assists with program coordination; instruction and guidance on international safety and security for students and faculty; enrollment in travel health insurance; and other logistical matters (reservations, payment processing, etc.); and program budget planning.

- <u>Global Health Internship Program</u>. This program was started in 2014 and is headed by Dr. Randy Page. The Global Health Internship Program aims to provide BYU students with a reflective and transformative global health and/or international development experience through field opportunities in public health and healthcare systems. Students are exposed to actual public health work, clinical practices, service learning, social services, and other educational experiences in various countries through which BYU students learn and understand the role of local and national social determinants in shaping a country's culture and social capital. The program started with 15 students who participated in two programs in two counties. By 2019, the program has 14 programs in 13 countries with more than 100 student participants.
- <u>Nepal Internship Program</u>. This program was started in 2018 and is headed by Drs. Thygerson and Johnston. The program started with six undergraduate students and two graduate students in 2018. In 2019, seven undergraduate students and two graduate students participated in this program in Nepal. BYU students assist the National Institute of Occupational Health and Safety in Nepal in recognizing and evaluating occupational health hazards in the Nepal brick kilns. The students conduct ergonomic and heat stress evaluations and silica air sampling using cutting-edge technology. The David M. Kennedy Center provided a \$5,000 research grant for the global health internship in Nepal.
- <u>Europe Study Abroad Program</u>. This program was started in 2016 and is headed by Drs. Crookston, Hall, and West. The program holds classes, exposes students to some of Europe's most healthy environments and people, provides students with opportunities to visit the World Health Organization, meet local public health officials that include city planners who are working to improve infrastructure for bike commuters, and to strengthen connections with faculty mentors and other participating students. When the program started in 2016, 39 students participated and visited five countries. In 2019, 41 students participated and visited eight countries.

Staff and Technical Support

Level of staff and technical support.

The department has a total of five office staff: A full-time secretary (Gale); a budget analyst and assessment coordinator (Eyre); a part-time internship coordinator and academic advisor (Lutz); a part-time academic advisor

(Liechty); and an MPH Program manager (Riggs). Since the last unit review, the department hired Liechty and Riggs.

The number of part-time student secretaries varies from 2-4 depending on department needs. Student secretaries cover the office phones; schedule student appointments with academic and internship advisors; advertise department events on posters and social media; print scientific posters for conferences; hire TAs/RAs; update student employee time cards; print tests; schedule rooms; and other miscellaneous tasks requested by faculty and staff.

Technical support for the Department of Public Health is provided by the College of Life Sciences IT department located in LSB 5102. The IT staff can be reached by phone (2-7178) during normal business hours.

The department is in the process of revamping its website this summer 2019. The University will be using a new system for websites, after which Kevin Bauer, the College of Life Sciences' webmaster, and his team will help update our department's website and will create a dynamic job board.

Adequacy of Space

Adequacy of space and furnishings (e.g., classrooms, labs, offices, TA offices).

The department is dealing with office space issues. There are 23 offices allocated to the department in the Life Sciences Building (LSB) for full and part-time faculty and staff (see Table 8). Of these 23 offices, 19 are faculty offices located on the second floor of the LSB. Each faculty office is about 130 sq. ft. and is furnished with a computer(s), three chairs, an office table with drawers, two steel cabinets, shelves, and a whiteboard. The four office spaces on the fourth floor of the LSB (4103, 4103B, 4108, and 4110) are occupied by the department chair, office staff, and the MPH program manager.

The department needs office spaces for its internship coordinator (Lutz), academic advisor (Liechty), and faculty. When the department moved to the LSB in 2014, Lutz's office was located in the Life Sciences Advising suite. However, her space was displaced when Life Sciences Advising increased its staff. Lutz is currently occupying the office vacated by Dr. Rosemary Thackeray. However, this is a temporary solution. The new faculty that will be hired will need an office and a solution will be needed for Lutz or Liechty. Faculty members who are currently serving administrative positions (Barnes, Neiger, and Thackeray) do not have office spaces in the department. Currently no space is available to accommodate these faculty if they choose to return to the department after their service in the college/university.

There is a shortage of classrooms dedicated specifically to the Department of Public Health. Currently, only two classrooms in the Life Sciences Building are assigned to the department: LSB 3031 and LSB 2037. LSB 3031 is a teaching laboratory for the Environmental/Occupational Health emphasis and LSB 2037 is used for classes, department faculty meetings, and for research meetings. Due to limited classroom availability at the Life Sciences Building, the faculty teach in other buildings on campus, primarily in the ESC and the MARB. The classrooms in these buildings are tech rooms equipped with a lectern and a projector. However, the physical design of these classrooms in the ESC and in the MARB presents a challenge in integrating active learning activities. The theater-style seating in the MARB basement classrooms and the too many desks in the ESC classrooms do not allow adequate space for students to move around.

	Name	Appointment	Office Number
1	Beard	Faculty	2046 LSB
2	Chaney	Faculty	2047 LSB
3	Crandall	Faculty	2049 LSB
4	Crookston	Faculty	2138 LSB
5	Glenn	Faculty	2032 LSB
6	Hall	Faculty	2140 LSB
7	Johnston	Faculty	2045 LSB
8	Magnusson	Faculty	2050 LSB
9	Merrill	Faculty	2063 LSB
10	Novilla	Faculty	2064 LSB
11	Page	Faculty	2030 LSB
12	Redelfs	Faculty	2136 LSB
13	Sloan	Faculty	2048 LSB
14	Spruance	Faculty	2149 LSB
15	Thacker	Faculty	2051 LSB
16	Thygerson	Faculty	2031 LSB
17	West	Faculty	2139 LSB
18	Lutz	Internship Coordinator	2137 LSB
19	Liechty	Advisor	2148 LSB
20	Hanson	Chair/Faculty	4103B LSB
21	Gale	Administrative Assistant	4110 LSB
22	Eyre	Budget Analyst	4108 LSB
23	Riggs	MPH Program Manager	4103A LSB

 Table 8. Department Office Allocations

<u>Note</u>: Barnes, Neiger, Thackeray currently serving outside of the department in college/university administrative positions. Neiger's position has been filled. Thackeray's position is pending a successful search.

There are four lab spaces assigned to the department for the MPH Program (LSB 3004 and LSB 3024) and for the Environmental-Occupational Health Emphasis (LSB 3031 and LSB 3006). MPH lab located in LSB 3004 is equipped with 14 computers, 2 televisions, and 1 printer; second MPH lab located in LSB 3024 is equipped with 10 computers, 1 television, and 1 printer; third, the Environmental/Occupational Health (EOH) teaching lab located in LSB 3031 contains state-of-the-art equipment and laptop computers for student learning and includes workspace and furnishings for 20 students. This lab has been a tremendous resource for our students in the environmental/occupational health emphasis. The fourth lab space is the Environmental/Occupational Health Research Lab located in LSB 3006 that is shared by several faculty members that include Dr. Steve Thygerson, Dr. Jim Johnston, Dr. Chantel Sloan, and Dr. John Beard. All four laboratories have computers with software for data analysis and presentation.

At the college level, there are warm and cold rooms, equipment rooms, a radioactive room, autoclaves, and the college Research Instrument Core. There are also five campus equipment facilities that we have access to if needed: 1) The Research Instrument Core, which contains an ELISA plate reader, confocal and fluorescent microscopes, flow cytometers, ultracentrifuges, and a phosphorimager; 2) Instrument Shop for equipment repair, calibration, and maintenance; 3) College of Life Science and Chemistry Stockrooms with lab supplies and chemicals; 4) DNA Sequencing Facility with dideoxy and high throughput capacity; and 5) Mass Spectrometry Facility.

Equipment

Condition of research, lab, and instructional equipment. Also consider the replacement schedule for these resources.

Computers used by individual faculty members are replaced about every four years. In most cases, the existing equipment is adequate for department teaching needs. The department also receives adequate funding annually to cover the cost of necessary equipment and resources for the Environmental/Occupational Health teaching lab. Classroom projectors and tech podiums generally work well. IT tech support is available. Overall, the condition of the research lab and instructional equipment is very good.

Other

Other facilities and/or resources important to the accomplishment of the unit's mission.

NA

Issues

Facilities and Resources Issues.

- <u>Office Shortage</u>. The department needs office spaces for its office staff and faculty. A temporary solution is in place, but a permanent solution needs to be determined by next summer (2020). Additionally, the department does not have office spaces for its faculty who may return to the department after serving in college/university administrative positions.
- <u>Classrooms not Conducive to Active Learning</u>. Some faculty members have expressed the difficulty in incorporating active teaching methods in their courses because of classroom design limitations. For example, the classrooms typically assigned to the department do not facilitate active learning approaches because of auditorium-style seating, as in the MARB basement classrooms, and in having too many desks, as in the ESC classrooms, which limit space for students to move around.
- <u>Lack of Proximity of Faculty Offices to Teaching Classrooms</u>. Faculty members have articulated the challenge and inconvenience of teaching in other buildings on campus particularly during inclement weather and/or when needing to meet with students on a one-on-one basis before or after class, as necessary. It also presents a disadvantage in situations in which an instructor needs to go back to his or her office in case additional instructional materials are needed.
- <u>Noise Issues in the LSB</u>. We have faculty offices that are located immediately outside the anatomy teaching labs on the second floor of the Life Sciences Building. During regular semesters, large groups of students congregate outside the labs waiting to enter the lab. During these times, the noise can be very distracting.
- <u>Slow/Disorganized IRB Review</u>. One faculty member stated that the BYU IRB is slow and disorganized in handling IRB applications such as mixing application review and approval, which can hold up projects. It should be noted that the BYU IRB has recently announced a series of changes to their protocols, including the submission and review processes. It is not clear to what extent these changes will address existing concerns, but it is worth monitoring.

BYU Department of Public Health

Mission Statements

University Mission

Brigham Young University

Aims of BYU Education

The mission of Brigham Young University is "to assist individuals in their quest for perfection and eternal life." To this end, BYU seeks to develop students of faith, intellect, and character who have the skills and the desire to continue learning and to serve others throughout their lives. These are the common aims of all education at BYU. Both those who teach in the classroom and those who direct activities outside the classroom are responsible for contributing to this complete education vision.

A BYU education should be (1) spiritually strengthening, (2) intellectually enlarging, and (3) character building, leading to (4) lifelong learning and service.

Unit Mission

Department of Public Health Mission and Vision

Core Purpose (Mission)

To promote public health worldwide through transformative teaching, research and service in an environment that builds faith and testimony.

Core Values

We are committed to:

- 1. **Being a Community of Lifters** As faculty, students, and staff we lift others through word and deed.
- 2. Being Excellent in Teaching and Research Our teaching is based on best practice, reflects current trends in public health, and engages students in and out of the classroom. We pursue research that has the potential to make a difference.
- 3. **Being Student Centered** We make strategic decisions based on the impact the choice will have on student learning and achievement.
- 4. Being Scientists of Faith We teach and mentor students through a gospel-centered lens.

Big Inspiring Goal (Vision)

Be acknowledged as the best stand-alone academic public health program in the world and the alma mater of the most influential leaders in public health.

Vivid Description

BYU Department of Public Health

Mission Statements

What it would be like to achieve the Big Inspiring Goal?

- 1. Students, alumni, faculty, and staff have firm testimonies of the restored gospel of Jesus Christ and demonstrate strength of character through faith-based service.
- 2. Graduates enter prestigious and challenging graduate programs, agencies, and organizations, and are represented in leadership positions.
- 3. Faculty are current in their fields and recognized nationally and internationally for their expertise.
- 4. Research conducted through the department is impactful and makes a difference in public health.
- 5. Our curriculum is state-of-the-art and is respected as a model for preparing public health professionals with the necessary skills for success in the workplace, further education, and life-long learning.
- 6. Alumni and other partners provide the necessary connections and resources for us to accomplish our purpose.

BYU Department of Public Health

Relationship Between University Aims and Unit Goals

University Aims	Unit Aims	
 Spiritually Strengthening: a) Teach every subject with the Spirit, b) "everyteacherwould keep his subject matter bathed in the light and color of the restored gospel", c) To build testimonies of the restored gospel of Jesus Christ, and d) Warms and enlightens students by the bright fire of their teacher's faith while enlarging their minds with knowledge 	 Core Value: Being a Community of Lifters – As faculty, students, and staff we lift others through word and deed. Core Value: Being Scientists of Faith – We teach and mentor students through a gospel-centered lens. Vivid Description: Students, alumni, faculty, and staff have firm testimonies of the restored gospel of Jesus Christ and demonstrate strength of character through faith-based service. 	
 Intellectually Enlarging: a) Ambitious commitment to pursue truth, b) Develop skills in basic tools of learning c) Develop a breadth understanding of the broad areas of human knowledge, and d) Provide in-depth study to develop real competence in at least one area of concentration. e) Faculty actively produces scholarly and creative works. 	 Core Value: Being Excellent in Teaching and Research – Our teaching is based on best practice, reflects current trends in public health, and engages students in and out of the classroom. We pursue research that has the potential to make a difference. Vivid Description: Faculty are current in their fields and recognized nationally and internationally for their expertise. Vivid Description: Faculty are current in their fields and recognized nationally and internationally for their expertise. Vivid Description: Research conducted through the department is impactful and makes a difference in public health. 	
 Character Building: a) Bring together the intellectual integrity of fine academic discipline with the spiritual integrity of personal righteousness. b) Encourage strong moral character and great mental capability, c) Everyexperience should therefore strengthen character and teach "those moral virtues which characterize the life and teachings of the Son of God". 	 Core Value: Being Scientists of Faith – We teach and mentor students through a gospel-centered lens. Vivid Description: Students, alumni, faculty, and staff have firm testimonies of the restored gospel of Jesus Christ and demonstrate strength of character through faith-based service. 	

BYU Department of Public Health

Relationship Between University Aims and Unit Goals

Lifelong Learning and Service:

- a) Inspire students to keep alive their curiosity and prepare them to continue learning throughout their lives,
- b) Point the way to a habit of constant learning,
- c) Nurture in its students the desire to use their knowledge and skills to bless their families, communities, the Church, and the larger society, and
- d) A service ethic should permeate every part of BYU's activities.
- Vision: Be acknowledged as the best stand-alone academic public health program in the world and the alma mater of the most influential leaders in public health.
- Vivid Description: Graduates enter prestigious and challenging graduate programs, agencies, and organizations, and are represented in leadership positions.
- Vivid Description: Our curriculum is state-of-the-art and is respected as a model for preparing public health professionals with the necessary skills for success in the workplace, further education, and lifelong learning.

BYU Department of Public Health

Strategic Plan

Big Inspiring Goal or Vision

Be acknowledged as the best stand-alone academic public health program in the world and the alma mater of the most influential leaders in public health.

Priorities

- 1. Enhance teaching and learning.
- 2. Conduct meaningful research.
- 3. Enhance faculty expertise.
- 4. Nurture alumni and donor relationships.
- 5. Prepare students to enter graduate school and the workforce.

Goals

- 1. To enhance teaching and learning, we will:
 - a. Establish a state-of-the-art curriculum that addresses national standards and is responsive to stakeholder needs.
 - i. Define culminating experiences for each emphasis and articulate expectations for students.
 - b. Address accreditation recommendations as appropriate.
 - i. Achieve CEPH compliance for the MPH program.
 - c. Provide and promote global study abroad and internship experiences.
 - d. Create mentored learning experiences through our research labs (e.g. environmental, HBO, mental health, family health).
 - e. Maintain best practices in curricular delivery including attention to manageable class sizes and courses taught by fulltime faculty.
 - f. Develop and maintain an up-to-date communication system for current and potential students that includes a website, social media channels, and electronic newsletter.
 - g. Monitor and respond to learning outcomes.
 - i. Update learning outcomes in response to curricular changes.
 - h. Understand and help address the mental health needs of students.
- 2. To conduct meaningful research, we will:
 - a. Involve graduate and undergraduate students in mentored research activities.
 - i. Establish an ad hoc mentoring committee to explore way to place greater value on student mentoring.
 - b. Pursue internal and external funding for research.
- 3. To enhance faculty expertise, we will:
 - a. Maintain an applicant pool through which future faculty members might be recruited.
 - b. Support conference attendance and professional development leaves as appropriate.

BYU Department of Public Health

Strategic Plan

- c. Support faculty release time for course and professional development opportunities.
- 4. To nurture alumni and donor relationships, we will:
 - a. Create and maintain an alumni database.
 - b. Establish an ad hoc alumni committee to explore areas of improvement.
 - c. Host an alumni event to link current students with professionals.
 - d. Develop flyers of our initiatives for donor presentations.
 - e. Continue efforts to establish endowments to support student scholarships.
- 5. To prepare students to enter graduate school and the workforce, we will:
 - a. Help students complete a high quality culminating experience (e.g., internship).
 - b. Promote the annual career fair and advocate for additional representation from public health related organizations and agencies.
 - c. Host regular events that connects current students with working professionals and alumni.
 - d. Help students successfully obtain national certifications (e.g., CHES, CPH, etc.).
 - e. Create a library of graduate program materials in order to raise awareness.

Indicators

- Students participating in the global study abroad and internship experiences.
- Creation and participation in research labs.
- Participation rates in social media and website.
- Students involved in conference presentations and publications.
- Faculty presentations and publications in high quality venues (productivity index).
- Faculty funding awards and other recognitions.
- Funding received through donors.
- Students matriculating in graduate programs or entering the public health workforce.
- Students successfully completing certification exams.

BYU Department of Public Health

Directed Student Learning Summary by Unit/Year

Directed Student Learning Summary by Unit/Year Brigham Young University

January 1, 2013 - December 31, 2019

Report Generated on 07/15/2019 (Enabled Accounts)

The numbers in this report are calculated based on all faculty members who are in Faculty Profile.

Any Directed Student Learning by faculty who are not in Faculty Profile are not included.

Note: Number of Grads and Number of Undergrads includes only BYU students. Total Mentored Students and Total Mentored Activities include directed student learning involving BYU students and students from other universities.

Department	Year	Number of Grads	Number of Undergrads	Total Mentored Students	Total Mentored Activities
LS: Public Health	2019	44	117	175	97
	2018	62	267	345	166
	2017	51	237	299	148
	2016	50	118	181	116
	2015	54	88	150	104
	2014	59	80	142	113
	2013	54	77	136	106

Directed Student Learning Summary by Unit/Year

Directed Student Learning Summary by Faculty/Year

Brigham Young University

January 1, 2013 - December 31, 2019

Report Generated on 07/15/2019 (Enabled Accounts)

The numbers in this report are calculated based on all faculty members who are in Faculty Profile. Any Directed Student Learning by faculty who are not in Faculty Profile are not included.

> - Life Sciences -LS: Public Health Full-time Faculty

Faculty Name	Year	Number of Grads (Chaired)	Number of Undergrads	Total Mentored Students	Total Mentored Activities
Barnes, Michael D	2019	1	4	6	2
	2018	2	5	8	3
	2017	1	4	6	2
	2016			1	1
	2015		1	2	2
	2014		1	2	2
	2013	2	1	4	2
Beard, John D	2019	3	7	10	10
	2018	5	11	16	16
	2017	2	5	7	7
	2016				
	2015				
	2014				
	2013				
Chaney, Robert A	2019		2	3	1
	2018		2	3	1
	2017		6	6	2
	2016	2	14	22	8
	2015	5	9	14	7
	2014	3	3	6	3
	2013				
Crandall, Aliceann	2019	2 (1)	8	13	10
	2018	5 (1)	10	18	15
	2017	9(1)	13	24	19
	2016	11 (1)	8	21	18
	2015	4(1)	2	8	7
	2014				

BYU Department of Public Health

Directed Student Learning Summary by Unit/Year

	2013				
Crookston, Benjamin T	2019	1	2	4	1
	2018	1	2	4	1
	2017	1	2	4	1
	2016	1	2	4	1
	2015	1	2	4	1
	2014		_	•	-
	2013				
Glenn, Jeffrey Donald	2019		5	5	3
, , , , , , , , , , , , , , , , , ,	2018		2	2	2
	2017				
	2016				
	2015				
	2014				
	2013				
Hall, Parley Cougar	2019	11	1	13	4
· · · · ·	2018	11 (2)	11	25	11
	2017	4 (2)	17	23	13
	2016	5 (1)	8	14	9
	2015	3 (1)	15	19	7
	2014	(1)	12	13	10
	2013	1 (1)	18	20	13
Hanson, Carl L	2019	3 (2)	6	13	13
	2018	3 (2)	6	13	13
	2017	3 (2)	6	13	13
	2016	3 (2)	6	13	13
	2015	3 (2)	6	13	13
	2014	3 (2)	6	13	13
	2013	6 (3)	7	18	17
Johnston, James D	2019	4	33	37	5
	2018	5	45	50	7
	2017	3	32	35	6
	2016	2	23	25	5
	2015	2 (1)	20	23	6
	2014	4 (2)	11	17	9
	2013	1 (1)	5	7	4
Magnusson, Brianna Michele	2019	2	8	10	10
	2018	2 (1)	10	13	13
	2017	(1)	5	6	6
	2016	2 (2)	5	9	9
	2015	5 (2)	7	14	14

BYU Department of Public Health

Directed Student Learning Summary by Unit/Year

	2014	9 (2)	5	16	
		. ,	5		16
	2013	8 (2)		11	11
Merrill, Ray M	2019				
	2018	1(1)	5	8	8
	2017	2	3	5	5
	2016		5	5	5
	2015	1 (1)	7	9	9
	2014	3 (2)	7	12	12
	2013	1	9	11	11
Neiger, Brad Lee	2019	(1)		1	1
	2018	(1)		1	1
	2017	(1)		1	1
	2016	(1)		1	1
	2015	(1)		1	1
	2014	(1)		1	1
	2013	(1)		1	1
Novilla, Maria Lelinneth	2019	2	20	22	9
Lagman Beloy					
	2018	2	20	22	9
	2017	2	20	22	9
	2016	1	12	13	6
	2015	2 (2)	2	6	6
	2014	3 (2)	3	8	8
	2013	2 (2)	4	8	8
Page, Randy M	2019		5	5	1
	2018		84	84	12
	2017		79	79	10
	2016	1		1	1
	2015		5	7	3
	2014	4	7	11	6
	2013	4	7	11	6
Redelfs, Alisha Hayden	2019	(1)	2	7	6
	2018	(1)	1	6	5
	2017			1	1
	2016				
	2015				
	2014				
	2013				
Sloan, Chantel D	2019	1 (1)	4	8	6
	2018	3 (1)	13	20	14
	2017	5 (2)	13	23	17
	2016	6(1)	21	29	18

BYU Department of Public Health

Directed Student Learning Summary by Unit/Year

	2015	6(1)	6	13	13
	2014	5	6	11	11
	2013	3	3	6	6
Spruance, Lori Andersen	2019	3	2	5	5
	2018	4	9	13	13
	2017	3	7	10	10
	2016	2	2	4	4
	2015				
	2014				
	2013				
Thacker, Evan L	2019	3	2	5	5
	2018	3	8	11	11
	2017	4	12	16	16
	2016	3	8	11	11
	2015	4	3	7	7
	2014	3	4	7	7
	2013	3		3	3
Thackeray, Rosemary	2019				
	2018		3	3	1
	2017	1 (1)	5	8	5
	2016	2 (1)	1	4	4
	2015	3 (2)		5	5
	2014	2 (2)		4	4
	2013	3 (3)		6	6
Thygerson, Steven M	2019	1(1)	6	8	5
	2018	3 (2)	20	25	10
	2017	1	8	10	5
	2016		3	4	2
	2015	1	3	5	3
	2014	5 (1)	15	21	11
	2013	6(1)	23	30	18
West, Joshua H	2019				
	2018				
	2017				
	2016				
	2015				
	2014				
	2013				

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Student Co-Authors

	2013	2014	2015	2016	2017	2018	2019
Number of faculty who had a BYU student co-author:	11	10	8	8	14	13	2
Number of publications with at least one BYU undergraduate student co-author:	14	10	4	1	10	10	0
Number of publications with at least one BYU graduate student co-author:	15	15	11	11	11	12	2
Total # of publications with at least one BYU student (undergraduate or graduate) co-	23	21	13	20	20	19	2
author:							
Total number of BYU undergraduate students who co-authored at least one publication:	20	12	5	19	24	17	
Total number of BYU graduate (masters or doctoral) students who co-authored at least	17	17	15	18	19	22	2
one publication:							

Student Co-Presenters

	2013	2014	2015	2016	2017	2018	2019
Number of faculty who had a BYU student co-presenter:	10	9	8	10	13	16	8
Number of presentations with at least one BYU undergraduate student co-presenter:	10	10	7	14	22	19	9
# of presentations with at least one BYU graduate (masters or doctoral) student co- presenter:	15	9	6	8	10	15	4
Total # of presentations with at least one BYU student (undergraduate or graduate) co- presenter	19	18	13	18	30	26	9
Total number of BYU undergraduate students who co-presented with a faculty member:	18	12	13	31	52	45	15
Total number of BYU graduate (masters or doctoral) students who co-presented with a faculty member:	14	10	7	7	7	26	4

Report was generated on 7/15/19 includes all enabled accounts

Note: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Student Co-authors and Co-presenters by Year Brigham Young University

January 1, 2013 - December 31, 2019 Report Generated on 07/15/2019 (Enabled Accounts)

2013

LS: Public Health

Student Co-authors

Number of faculty who had a BYU student co-author: 11

Number of publications with at least one BYU undergraduate student co-author: 14

Number of publications with at least one BYU graduate student co-author: 15

Total number of publications with at least one BYU student (undergraduate or graduate) coauthor: 23

1
1
1
1
1
1
1
2
1
1
1
1
1
1
1
1
1
1
1

Names of BYU undergraduate students who co-authored a publication and number of publications:

BYU Department of Public Health

Student Co-authors and Co-presenters by Year				
Thackeray, Callie R	2			

Total number of BYU undergraduate students who co-authored at least one publication: 20

Names of BYU graduate (masters or doctoral) students who co-authored a publication and number of publications:

Arredondo, Victor	1
Boyer, Caitlin	1
Brutsch, Elizabeth	1
Burton, S	2
Burton, S H	3
Burton, Scott	1
Burton, Scott H	1
Bush, Jesse	1
Calvert, Joshua	1
Farrell, Janell	1
Guerra, Brittnay	1
Hill-Mey, Patricia E	1
Johnson, Amanda	1
Lindsay, Amber R	1
Lister, Cameron	1
Sloan, Arielle	2
Steadman, Mindy	1

Total number of BYU graduate (masters or doctoral) students who co-authored at least one publication: 17

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

Student Co-presenters

Number of faculty who had a BYU student co-presenter: 10

Number of presentations with at least one BYU undergraduate student co-presenter: 10

Number of presentations with at least one BYU graduate (masters or doctoral) student copresenter: 15

Total number of presentations with at least one BYU student (undergraduate or graduate) copresenter: 19

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Names of BYU undergraduate students who co-presented with a faculty member and number of presentations:

presentations.	
Adams, Matthew	2
Argyle, Trenton	1
Ashcraft, Kendra	1
Au, Julianna Lambrechtsen	2
Barnett, Allen	3
Berrett, Brian	1
Davis, Bryon	4
Jashinsky, Jared	1
Johnson, Jeanette	1
Johnson, Jeannette	1
Mann, Wichittra	1
Okada, Brittany	1
Shirts, Jeffrey	3
Shumway, Jonathan	5
Sloan, Arielle	1
Sloan, Arielle	1
Sorensen, Chelsea	2
Sypher, Jacob	3

Total number of BYU undergraduate students who co-presented with a faculty member: 18

Names of BYU graduate (masters or doctoral) students who co-presented with a faculty member and number of presentations:

Arredondo, Victor	1
Brutsch, Elizabeth	1
Burton, Scott	2
Cariello, Miriam	2
Cowan, Logan	1
Hedin, Riley J	1
Hunter, Brad	2
Johnson, Jeanette	2
Lister, Carmeron	1
Listor, Cameron	1
Pratt, Jennifer	1
Sloan, Arielle	1
Van Wagenen, S.	1
Vance, David	1

Total number of BYU graduate (masters or doctoral) students who co-presented with a faculty member: 14

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

2014

LS: Public Health

Student Co-authors

Number of faculty who had a BYU student co-author: 10

Number of publications with at least one BYU undergraduate student co-author: 10

Number of publications with at least one BYU graduate student co-author: 15

Total number of publications with at least one BYU student (undergraduate or graduate) coauthor: 21

Names of BYU undergraduate students who co-authored a publication and number of publications:

Assay, Stephen	1
Brodegard, David	1
Chipman, Katherine	1
Cox, Abby	1
Downey, Jordan	1
Fillerup, Ashley	1
Hedges, Stephanie	1
Merrill, Joseph G	1
Morris, R. G.	1
Sax, Tyler	1
Steadman, Mindy	1
Wright, Allison	1

Total number of BYU undergraduate students who co-authored at least one publication: 12

Names of BYU graduate (masters or doctoral) students who co-authored a publication and number of publications:

Burton, S. H.	1
Cannon, Ben	1
Chao, M	1
Church, Jessica	1
Earl, Nathan	1
Hedin, Riley J	1
Hinman, Tiffany	1

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Lister, Cameron	2
Lister, Cameron E	3
Maxwell, Martha	1
Perry, Jessica	1
Pratt, Katherine B	1
Sloan, Arielle	4
Steadman, Mindy	1
Strong, Jessica	1
Vance, David	2
Vehawn, Jennifer	1

Total number of BYU graduate (masters or doctoral) students who co-authored at least one publication: 17

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

Student Co-presenters

Number of faculty who had a BYU student co-presenter: 9

Number of presentations with at least one BYU undergraduate student co-presenter: 10

Number of presentations with at least one BYU graduate (masters or doctoral) student copresenter: 9

Total number of presentations with at least one BYU student (undergraduate or graduate) copresenter: 18

Names of BYU undergraduate students who co-presented with a faculty member and number of presentations:

1
1
1
1
1
1
1
1
1
1
2

BYU Department of Public Health

Student Co-authors and Co-presenters by Year		
Wahlquist, Brooke		

Total number of BYU undergraduate students who co-presented with a faculty member: 12

Names of BYU graduate (masters or doctoral) students who co-presented with a faculty member and number of presentations:

Cannon, Benjamin	1
Hatch, Alison	1
Johnson, Jeanette	1
Lovett, Victoria	1
Miner, Alison	1
Schank, Christa	1
Sevy, Melissa	1
Sloan, Arielle	3
Strong, Jessica	1
VanWagenen, Sarah A	1

Total number of BYU graduate (masters or doctoral) students who co-presented with a faculty member: 10

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

2015

LS: Public Health

Student Co-authors

Number of faculty who had a BYU student co-author: 8

Number of publications with at least one BYU undergraduate student co-author: 4

Number of publications with at least one BYU graduate student co-author: 11

Total number of publications with at least one BYU student (undergraduate or graduate) coauthor: 13

Names of BYU undergraduate students who co-authored a publication and number of publications:

Bowen, Elise	1
Gibby, JT	1
Jenne, Neal	1
Steele, Brittanie	1
Young, Derik	1

Total number of BYU undergraduate students who co-authored at least one publication: 5

1
1
1
1
1
2
1
1
1
2
1
1
1
1

Names of BYU graduate (masters or doctoral) students who co-authored a publication and number of publications:

BYU Department of Public Health

Student Co-authors and Co-presenters by Year	
Vance, David	1

Total number of BYU graduate (masters or doctoral) students who co-authored at least one publication: 15

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

Student Co-presenters

Number of faculty who had a BYU student co-presenter: 8

Number of presentations with at least one BYU undergraduate student co-presenter: 7

Number of presentations with at least one BYU graduate (masters or doctoral) student copresenter: 6

Total number of presentations with at least one BYU student (undergraduate or graduate) copresenter: 13

Names of BYU undergraduate students who co-presented with a faculty member and number of presentations:

presentations.	
5. Christiansen, M.	1
Barber, Bradley	1
Bradshaw, Rebecca	1
Clader, Spencer	1
Cook, R.	1
Dalisay, Reshley	1
Dayton, Natalie	1
Graul, Robert	1
Haynie, Deson	2
Hoybjerg, T.	1
Philip, Tyler	1
Tuttle, Christopher	1
Walker, Vanessa	1

Total number of BYU undergraduate students who co-presented with a faculty member: 13

Names of BYU graduate (masters or doctoral) students who co-presented with a faculty member and number of presentations:

Call, Lauren	1
Chalmers, A Luke	1

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Karki, Reena	1
Miner, Alison	1
Payne, Hannah	1
Schank, Christa	1
Tuttle, Noelle	1

Total number of BYU graduate (masters or doctoral) students who co-presented with a faculty member: 7

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

2016

LS: Public Health

Student Co-authors

Number of faculty who had a BYU student co-author: 8

Number of publications with at least one BYU undergraduate student co-author: 11

Number of publications with at least one BYU graduate student co-author: 11

Total number of publications with at least one BYU student (undergraduate or graduate) coauthor: 20

Names of BYU undergraduate students who co-authored a publication and number of publications:

I	
Braudt, Kendra	1
Dalisay, Reshley	1
Davis, Spencer S	1
Dayton, Natalie	1
Fortuna, Chris	1
Frutos, Aaron	1
Hoybjerg, Taylor G	1
Johnson, Julene B	1
Johnson, Sally	1
Kruman, Bryce A	1
Nelson, Morgan C	1
Orton, Taylor S	1
Packer, Justin	1
Palmer, Chella	1
Pierce, Hayley Marie	1
Stones, Elizabeth	1
Taylor, Oliver	1
Tuttle, Steven C	1
Zimmerman, Grant C	1

Total number of BYU undergraduate students who co-authored at least one publication: 19

Names of BYU graduate (masters or doctoral) students who co-authored a publication and number of publications:

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Bateman, Simone	1
Davis, Siena	1
Davis, Siena F	1
Ellsworth, Marissa	1
Fujiki, Robert B	1
Hall, Shelby	1
Heaton, Thomas L	1
Hine, Cassidy A	1
Jensen, Kaylee	1
Khomitch, Elena	1
Nordhagen, Amber	1
Payne, Hannah	4
Payne, Hannah E	1
Pierce, Jenny L	1
Robb, Whitney	1
Strickling, Kate	1
Tuttle, Noelle	1
Wilkinson, Jessica	3

Total number of BYU graduate (masters or doctoral) students who co-authored at least one publication: 18

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

Student Co-presenters

Number of faculty who had a BYU student co-presenter: 10

Number of presentations with at least one BYU undergraduate student co-presenter: 14

Number of presentations with at least one BYU graduate (masters or doctoral) student copresenter: 8

Total number of presentations with at least one BYU student (undergraduate or graduate) copresenter: 18

Names of BYU undergraduate students who co-presented with a faculty member and number of presentations:

Abigail, Gunn	1
Barney, Taylor	2
Bradshaw, Rebecca	1

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Brown, Marinn	2
Christensen, Emily	3
Cook, Ryan B	1
Cox, Aaron	1
Cox, Alexandra	1
Crandall, Justin	1
Dalisay, Reshley	2
Dayton, Natalie	1
Evans, Kirsten	1
Graul, Rob J	2
Harding, Michael C	1
Harding, Tiffany M	1
Hoybjerg, Taylor G	1
Kruman, Bryce A	1
Meyers, Sheldon	1
Nelson, Morgan C	1
Nielsen, Natalia	1
Novilla, Kirsten	1
Palmer, Vanessa	1
Paulson, Sterling	1
Rachel, Hancock	1
Smith, Madeleine	1
Thackeray, Callie R	1
Torgersen, Breanna	2
Torgersen, Breanna K	1
Tuttle, Steven C	1
Tuttle, Steven C	1
Westover, Tarah	1

Total number of BYU undergraduate students who co-presented with a faculty member: 31

Names of BYU graduate (masters or doctoral) students who co-presented with a faculty member and number of presentations:

Allsop, Yvonne	1
Davis, Siena F	3
Hilton, Helen	1
Pugh, Sierra	1
Scrobotovici, M	1
Tuttle, Noelle	1
VanWagenen, Sarah A	1

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Total number of BYU graduate (masters or doctoral) students who co-presented with a faculty member: 7

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

2017

LS: Public Health

Student Co-authors

Number of faculty who had a BYU student co-author: 14

Number of publications with at least one BYU undergraduate student co-author: 10

Number of publications with at least one BYU graduate student co-author: 11

Total number of publications with at least one BYU student (undergraduate or graduate) co-author: 20

Names of BYU undergraduate students who co-authored a publication and number of publications:

p de li c uite list	
Barney, T.	1
Brown, M.	1
Christensen, Emily Mae	1
Cook, Ryan	1
Cooper, Victoria C.	1
Crandall, J.	1
Ehlert, A N	1
Frutos, Aaron	1
Graul, Robert	1
Hendrickson, Nathan R.	1
Hoybjerg, Taylor	1
Jashinksy, Jared M	1
Johnson, Erin	1
Kruman, Bryce	1
McCord, Tyler A.	1
Myers, Sheldon	1
Nelson, Morgan	1
Novilla, L Kirsten	1
Paulson, S.	1
Robinson, Daniel R.	1
Smith, M.	1
Thackeray, Callie R	1
Tuttle, Steven	1
Westover, T.	1

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Total number of BYU undergraduate students who co-authored at least one publication: 24

Names of BYU graduate (masters or doctoral) students who co-authored a publication and number of publications:

Allsop, Yvonne	1
Belvedere, Lindsay M	1
Covey, Emarie L.	1
Davis, Siena F	1
Davis, Sienna	1
Hayhurst, Cerissa	1
Hene, Cassidy	1
Kang, Sorah	1
Lister, Cameron	1
Patha, Samuel A.J.	1
Pathay, Samual	1
Payne, Hannah	3
Payne, Hannah E.	1
Ray, Nicole	1
Scrobotovici, M	1
Strickling, Kate	1
Van Wagenen, Sarah A	1
Wilkinson, J	1
Wilkinson, Jessica	1

Total number of BYU graduate (masters or doctoral) students who co-authored at least one publication: 19

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

Student Co-presenters

Number of faculty who had a BYU student co-presenter: 13

Number of presentations with at least one BYU undergraduate student co-presenter: 22

Number of presentations with at least one BYU graduate (masters or doctoral) student copresenter: 10

Total number of presentations with at least one BYU student (undergraduate or graduate) copresenter: 30

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

resentations: Aitken, Talon	1	
Ashley, Young	1	
Audrey, Pister	1	
Bingham, Alexandria	1	
Bradshaw, Rebecca	1	
Brown, Taylor	1	
Calder, Spencer	3	
Cooper, Victoria C.	1	
Cox, Allison	1	
David, Figueroa	1	
Doria, Russell	1	
Doria, Russell B.	1	
Dungan, M	1	
Ehlert, A N	1	
Ellis, Tabetha	3	
Eppich, Kraymer	1	
Eppich, Kraymer	2	
Esplin, Jordan	1	
Evans, Kirsten	1	
Frutos, Aaron	4	
Galvao, Laura A	1	
Galvao, Laura Antillon	2	
Gibbons, Sydney	2	
Hagerdorn, Robert	1	
Hendrickson, Nathan R.	1	
Hoch, Kellie	1	
Hunt, Emma	1	
Jacob, Miller	1	
Jensen, A	1	
Larsen, Melissa	1	
Martinez, Serena	1	
Mateos, David	1	
McLean, Taylor	1	
Meek, Katie	1	
Miller, Jake	1	
Nelson, Hailee	1	
Nielsen, Natalia	1	
Ortiz, David	1	
Ortiz, David	1	

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Dolmon Vanaga	1	
Palmer, Vanessa	1	
Quintana, Noyra M	1	
Quintana, Noyra Melissa	2	
Searles, Megan	1	
Stoneking, Nathan	1	
Trette-McLean, Taylor	1	
Varner, Julie	1	
Walton, Dan	1	
Westhoff, Whitney	1	
Wong, Westin	1	
Woo, Ellen	1	
Wu, Xiao Juan	1	
Zak, Reimann	1	

Total number of BYU undergraduate students who co-presented with a faculty member: 52

Names of BYU graduate (masters or doctoral) students who co-presented with a faculty member and number of presentations:

Allsop, Yvonne	2
Cunico, Lauren	1
Haines, Amanda	1
Hilton, Helen	1
Kaitana, Dahle	1
Patha, Samuel A.J.	1
Pugh, Sierra	3

Total number of BYU graduate (masters or doctoral) students who co-presented with a faculty member: 7

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

2018

LS: Public Health

Student Co-authors

Number of faculty who had a BYU student co-author: 13

Number of publications with at least one BYU undergraduate student co-author: 10

Number of publications with at least one BYU graduate student co-author: 12

Total number of publications with at least one BYU student (undergraduate or graduate) coauthor: 19

Names of BYU undergraduate students who co-authored a publication and number of publications:

F	
Bailey, Ryan J	1
Bennion, Erica	1
Bramwell, Jacob	1
Frutos, Aaron	2
Gibbons, Sydney	1
Harding, Michael C	1
Harding, Tiffany M	1
Hooper, Audrey P.	1
Miller, Jacob R.	1
Nielsen, Natalia R	1
Reimann, Zakary	1
Schnell, Abigail J	1
Telford, Carson	1
Torgersen, Breanna K	1
Trette-McLean, Taylor	1
Willey, Victoria A	1
Young, Ashley M.	1

Total number of BYU undergraduate students who co-authored at least one publication: 17

Names of BYU graduate (masters or doctoral) students who co-authored a publication and number of publications:

Alexander, Chelsey	1
Allsop, Yvonne	1

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Andreasen, Rebecca	1	
Belvedere, Lindsay	1	
Berrett, Andrew N.	1	
Dahle, Kaitana	1	
Davis, Siena	1	
Davis, Siena F	1	
Galbraith, Nicole	1	
Grant, Emily	1	
Haines, Amanda	1	
Hammond, C A	1	
Hine, Cassidy	1	
Hoj, Taylor	1	
Jones, Allyn	1	
Kriser, Heidi	1	
Payne, Hannah	1	
Payne, Hannah E.	1	
Riley, Aubrey Burton	1	
Sever, Trent	1	
Smith, Rilee	1	
Thomas, Kendra	1	

Total number of BYU graduate (masters or doctoral) students who co-authored at least one publication: 22

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

Student Co-presenters

Number of faculty who had a BYU student co-presenter: 16

Number of presentations with at least one BYU undergraduate student co-presenter: 19

Number of presentations with at least one BYU graduate (masters or doctoral) student copresenter: 15

Total number of presentations with at least one BYU student (undergraduate or graduate) copresenter: 26

Names of BYU undergraduate students who co-presented with a faculty member and number of presentations:

|--|

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Anderson, J D 1 Anderson, M A 1 Bellini, S G 1 Bradford, Grace 1 Bradford, Grace 1 Claunch, K 1 Claunch, K D 1 Claunch, K D 1 Cooper, Torie 1 Dungan, M 1 Dungan, M, T 1 Eklert, L 1 Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, K 1 Evans, K 1 Glavac, Laura A 1 Glavac, Laura A 1 Glaver, Adrian 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jackson, Brynne 1 Jensen, A 2 Miller, Jacob 1 Martinez, P 1 Martinez, P 1 Martinez, P 1 Jensen, A 2 King, Jaron		1
Bellini, S G 1 Bennion, Natalie 1 Bradford, Grace 1 Burdett, Stephanie 1 Claunch, K 1 Claunch, K D 1 Cooper, Torie 1 Dungan, M 1 Dungan, M 1 Ehlert, L 1 Ekins, Taryn 1 Eyans, K 1 Evans, K 1 Evans, K 1 Galvao, Laura A 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Heimmer, Elyssa 1 Jackson, Brync 1 Jensen, A 2 King, Jaron 1 Low, Joshua 1 Martinez, P 1 Martinez, P 1 Montgomery, Hunter D 1 Mondy, Mariah 1 Nash, Ryan 1 Moody, Mariah 1 Nixon, Abigial M. 1 Nixon, Abigial M. 1 Quintana, Noyra	Anderson, J D	1
Bennion, Natalie 1 Bradford, Grace 1 Burdett, Stephanie 1 Cheung, Aaron 1 Claunch, K 1 Claunch, K D 1 Cooper, Torie 1 Dungan, M 1 Dungan, MT 1 Ehlert, L 1 Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, Kaddison 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jackson, Brynne 1 Jackson, Matha 1 Mawhinney, K 1 Martinez, P 1 Miller, Jacob 1 Montgomery, Hunter D 1 Moody, Mariah 1 Nixon		
Bradford, Grace 1 Burdett, Stephanie 1 Chcung, Aaron 1 Claunch, K 1 Claunch, K D 1 Cooper, Torie 1 Dungan, M 1 Dungan, MT 1 Ehlert, L 1 Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, K 1 Galvao, Laura A 1 Glover, Adrian 1 Glover, Adrian 1 Himmere, Elyssa 1 Jackson, Nathan R 1 Himmere, Elyssa 1 Jackson, Brynne 1 Jensen, A 2 King, Jacon 1 Martinez, P 1 Montgomery, Hunter D 1		
Burdett, Stephanie 1 Chaunch, K 1 Claunch, K D 1 Cooper, Torie 1 Dungan, M 1 Dungan, MT 1 Ehlert, L 1 Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, Maddison 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Glover, Adrian 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jensen, A 2 King, Jaron 1 Low, Joshua 1 Martinez, P 1 Matinez, K 1 Miller, Jacob 1 Montgomery, Hunter D 1 Montgomery, Hunter D 1 Nixon, Abigial M. 1 Nukon, Supan 1 Nixon, Abigi		
Cheung, Aaron 1 Claunch, K 1 Claunch, K D 1 Cooper, Torie 1 Dungan, M 1 Dungan, M T 1 Ehlert, L 1 Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, K 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jackson, Brynne 1 Low, Joshua 1 Mattinez, P 1 Mattinez, P 1 Mattinez, Iacob 1 Mattinez, Iacob 1 Montgomery, Hunter D 1 Nash, Ryan 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Romney, Em		
Claunch, K 1 Cooper, Torie 1 Dungan, M 1 Dungan, MT 1 Ehlert, L 1 Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, K 1 Francis, Cameron 2 Galvao, Laura A 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jackson, Songuan 1 Low, Joshua 1 Martinez, P 1 Martinez, P 1 Martinez, P 1 Montgomery, Hunter D 1 Montgomery, Hunter D 1 Montgomery, Hunter D 1 Nash, Ryan 1 Nash, Ryan 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Romney, Emily R 1 Slo		
Claunch, K D 1 Cooper, Torie 1 Dungan, M 1 Dungan, M T 1 Ehlert, L 1 Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, Maddison 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jackson, Brynne 1 Low, Joshua 1 Mathinney, K 1 Martinez, P 1 Martinez, P 1 Martinez, P 1 Montgomery, Hunter D 1 Montgomery, Hunter D 1 Nash, Ryan 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Romney, Emily R 1 <t< td=""><td></td><td></td></t<>		
Cooper, Torie 1 Dungan, M 1 Dungan, M T 1 Ehlert, L 1 Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, K 1 Evans, Katom 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Glover, Adrian 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jensen, A 2 King, Jaron 1 Low, Joshua 1 Mathiney, K 1 Mattinez, P 1 Montgomery, Hunter D 1 Moody, Mariah 1 Nixon, Abigial M. 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Romney, Emily R 1 Sloan, Chantel D 1 Startu		1
Dungan, M 1 Dungan, M T 1 Ehlert, L 1 Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, K 1 Evans, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jensen, A 2 King, Jaron 1 Low, Joshua 1 Mathiney, K 1 Martinez, P 1 Merrill, Alex 2 Miller, Jacob 1 Moody, Mariah 1 Nash, Ryan 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Romey, Emily R 1 Sloan, Chantel D 1 Startup, E 1 Tovar, Ida <t< td=""><td></td><td>1</td></t<>		1
Dungan, M T 1 Ehlert, L 1 Ekns, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, Maddison 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jackson, Brynne 1 Jensen, A 2 King, Jaron 1 Low, Joshua 1 Martinez, P 1 Merrill, Alex 2 Miller, Jacob 1 Moody, Mariah 1 Nash, Ryan 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Romney, Emily R 1 Sloan, Chantel D 1 Startup, E 1 Tovar, Ida 1	Cooper, Torie	1
Ehlert, L 1 Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, Madison 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jensen, A 2 King, Jaron 1 Low, Joshua 1 Mattinez, P 1 Martinez, P 1 Montgomery, Hunter D 1 Moody, Mariah 1 Nash, Ryan 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Romney, Emily R 1 Sloan, Chantel D 1 Startup, E 1 Tovar, Ida 1	Dungan, M	1
Ekins, Taryn 1 Esplin, Jordan 1 Evans, K 1 Evans, K 1 Evans, Maddison 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jensen, A 2 King, Jaron 1 Low, Joshua 1 MaWhinney, K 1 Miller, Jacob 1 Montgomery, Hunter D 1 Moody, Mariah 1 Nash, Ryan 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Romney, Emily R 1 Sloan, Chantel D 1 Startup, E 1 Tovar, Ida 1	Dungan, M T	1
Esplin, Jordan 1 Evans, K 1 Evans, Maddison 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jackson, Brynne 1 Jackson, Brynne 1 Jensen, A 2 King, Jaron 1 Low, Joshua 1 Matrinez, P 1 Matrinez, P 1 Matrinez, P 1 Montgomery, Hunter D 1 Moody, Mariah 1 Noody, Mariah 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Rommey, Emily R 1 Sloan, Chantel D 1 Startup, E 1 Tovar, Ida 1		1
Evans, K 1 Evans, Maddison 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jackson, Brynne 1 Jackson, Jaron 1 Low, Joshua 1 Martinez, P 1 Matrinez, P 1 Merrill, Alex 2 Miller, Jacob 1 Moody, Mariah 1 Nash, Ryan 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Romney, Emily R 1 Sloan, Chantel D 1 Startup, E 1 Tovar, Ida 1	Ekins, Taryn	1
Evans, Maddison 1 Francis, Cameron 2 Galvao, Laura A 1 Glover, Adrian 1 Glover, Adrian 1 Graul, Robert 1 Hansen, Jordyn 1 Hendrickson, Nathan R 1 Himmer, Elyssa 1 Jackson, Brynne 1 Jackson, Brynne 1 Jackson, Brynne 1 Low, Joshua 1 MaWhinney, K 1 Martinez, P 1 Martinez, P 1 Montgomery, Hunter D 1 Montgomery, Hunter D 1 Moody, Mariah 1 Nash, Ryan 1 Nixon, Abigial M. 1 Quintana, Noyra Melissa 1 Romney, Emily R 1 Sloan, Chantel D 1 Startup, E 1 Tovar, Ida 1		1
Francis, Cameron2Galvao, Laura A1Glover, Adrian1Graul, Robert1Hansen, Jordyn1Hendrickson, Nathan R1Himmer, Elyssa1Jackson, Brynne1Jensen, A2King, Jaron1Low, Joshua1MaWhinney, K1Merrill, Alex2Miller, Jacob1Montgomery, Hunter D1Moody, Mariah1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Evans, K	1
Galvao, Laura A1Glover, Adrian1Graul, Robert1Hansen, Jordyn1Hendrickson, Nathan R1Himmer, Elyssa1Jackson, Brynne1Jackson, Brynne1Jensen, A2King, Jaron1Low, Joshua1MaWhinney, K1Martinez, P1Merrill, Alex2Miller, Jacob1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Sloan, Chantel D1Startup, E1Tovar, Ida1	Evans, Maddison	1
Glover, Adrian1Graul, Robert1Hansen, Jordyn1Hendrickson, Nathan R1Himmer, Elyssa1Jackson, Brynne1Jensen, A2King, Jaron1Low, Joshua1MaWhinney, K1Martinez, P1Miller, Jacob1Moody, Mariah1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Francis, Cameron	2
Graul, Robert1Hansen, Jordyn1Hendrickson, Nathan R1Himmer, Elyssa1Jackson, Brynne1Jensen, A2King, Jaron1Low, Joshua1MaWhinney, K1Martinez, P1Miller, Jacob1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Galvao, Laura A	1
Hansen, Jordyn1Hendrickson, Nathan R1Himmer, Elyssa1Jackson, Brynne1Jensen, A2King, Jaron1Low, Joshua1MaWhinney, K1Martinez, P1Merrill, Alex2Miller, Jacob1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Glover, Adrian	1
Hendrickson, Nathan R1Himmer, Elyssa1Jackson, Brynne1Jensen, A2King, Jaron1Low, Joshua1MaWhiney, K1Martinez, P1Merrill, Alex2Miller, Jacob1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Graul, Robert	1
Himmer, Elyssa1Jackson, Brynne1Jensen, A2King, Jaron1Low, Joshua1MaWhinney, K1Martinez, P1Merrill, Alex2Miller, Jacob1Montgomery, Hunter D1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Hansen, Jordyn	1
Jackson, Brynne1Jensen, A2King, Jaron1Low, Joshua1MaWhinney, K1Martinez, P1Merrill, Alex2Miller, Jacob1Montgomery, Hunter D1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Hendrickson, Nathan R	1
Jensen, A2King, Jaron1Low, Joshua1MaWhinney, K1Martinez, P1Merrill, Alex2Miller, Jacob1Montgomery, Hunter D1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Himmer, Elyssa	1
King, Jaron1Low, Joshua1MaWhinney, K1Martinez, P1Merrill, Alex2Miller, Jacob1Montgomery, Hunter D1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Jackson, Brynne	1
Low, Joshua1MaWhinney, K1Martinez, P1Merrill, Alex2Miller, Jacob1Montgomery, Hunter D1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Jensen, A	2
MaWhinney, K1Martinez, P1Merrill, Alex2Miller, Jacob1Montgomery, Hunter D1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	King, Jaron	1
Martinez, P1Merrill, Alex2Miller, Jacob1Montgomery, Hunter D1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Low, Joshua	1
Martinez, P1Merrill, Alex2Miller, Jacob1Montgomery, Hunter D1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	MaWhinney, K	1
Miller, Jacob1Montgomery, Hunter D1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Martinez, P	1
Montgomery, Hunter D1Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Merrill, Alex	2
Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Miller, Jacob	1
Moody, Mariah1Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Montgomery, Hunter D	1
Nash, Ryan1Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1		1
Nixon, Abigial M.1Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1		1
Quintana, Noyra Melissa1Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1	Nixon, Abigial M.	1
Romney, Emily R1Sloan, Chantel D1Startup, E1Tovar, Ida1		1
Sloan, Chantel D1Startup, E1Tovar, Ida1		1
Startup, E1Tovar, Ida1		1
Tovar, Ida 1		1
		1
		1

BYU Department of Public Health

Student Co-authors and Co-presenters by Year							
Tueller, Josie	1						
Westra, J	1						

Total number of BYU undergraduate students who co-presented with a faculty member: 45

Names of BYU graduate (masters or doctoral) students who co-presented with a faculty member and number of presentations:

Andreasen, Rebecca Ann	1
Beck, Robin	1
Belvedere, Lindsey	1
Benally, Shelby	1
Covey, E	1
Covey, Emarie	1
Cowger, Ashlin	1
Dahle, Kaitana	1
Davis, E A	3
Dorsan, Gina	1
Heaton, Tom	1
Hilton, Helen	1
Manzione, Lauren	1
Muralidharan, Chandni	1
Powell, Elizabeth	1
Riley, Aubrey B	1
Sever, Trent	1
Shrestha, Shilpa	1
Smith, Rilee	1
Thomas, Clare	1
Thomas, Kendra	1
Tounkara, M D	1
Tounkara, Mamadou	1
Verdeja, M	1
Verdeja, M A	1
Verdeja, Marco	1

Total number of BYU graduate (masters or doctoral) students who co-presented with a faculty member: 26

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

2019

LS: Public Health

Student Co-authors

Number of faculty who had a BYU student co-author: 2

Number of publications with at least one BYU undergraduate student co-author: 0

Number of publications with at least one BYU graduate student co-author: 2

Total number of publications with at least one BYU student (undergraduate or graduate) coauthor: 2

Names of BYU graduate (masters or doctoral) students who co-authored a publication and number of publications:

Berrett, Andrew N	1
Shrestha, Shilpa	1

Total number of BYU graduate (masters or doctoral) students who co-authored at least one publication: 2

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

Student Co-presenters

Number of faculty who had a BYU student co-presenter: 8

Number of presentations with at least one BYU undergraduate student co-presenter: 9

Number of presentations with at least one BYU graduate (masters or doctoral) student copresenter: 4

Total number of presentations with at least one BYU student (undergraduate or graduate) copresenter: 9

Names of BYU undergraduate students who co-presented with a faculty member and number of presentations:

BYU Department of Public Health

Student Co-authors and Co-presenters by Year

Bennion, E	2
Coombs, Sharly	1
Ehlert, A	3
Ellis, Quentin	1
Evans, K	3
Ghanadan, Gabriel	1
Hagman, Katherine	1
Harris, M L	2
MaWhinney, K	5
Novilla, Kirsten	1
Peterson, Emily	1
Startup, E	3
Tueller, Josie A	1
Ward, Jessica	1
Westra, J	3

Total number of BYU undergraduate students who co-presented with a faculty member: 15

Names of BYU graduate (masters or doctoral) students who co-presented with a faculty member and number of presentations:

Covey, E	3
Cowger, Ashlin E	1
Scrobotovici, M	3
Tounkara, M D	3

Total number of BYU graduate (masters or doctoral) students who co-presented with a faculty member: 4

NOTE: Students may be counted more than once in the above tables if their name was not typed in exactly the same each time it was entered in Faculty Profile.

BYU Department of Public Health

Experiential Learning 2018-2019

Experiential Learning 2018-19

2018-19		
Experience Description	Number of Students	Expenditures
Students were involved in a PhotoVoice project which required them to meet with and represent the stories of vulnerable community members facing family health problems to which program directors or policy makers should understand to better provide services and resources to meet those needs. Students created at least two photovoice products and then presented them at the Utah County Health Department to key program managers and staff who do outreach to vulnerable populations in our area. Funds were used to pay student wages and for gift cards/incentives to give community participants.	17	\$4,133
One student of Dr. Evan Thacker, and other former students, presented at the Gerontological Society of America annual meeting in Boston, MA. They presented a poster of their research project entitled "SUCCESSFUL AGING: CROSS-CULTURAL COMPARISON OF OLDER ADULTS' LAY PERSPECTIVES."	1	\$1,594
Dr. Ben Crookston, Josh West, and Cougar Hall took students to train community health workers (CHW) in Lima, Peru on Monday December 3rd. CHWs travelled from Peru, Paraguay, Ecuador, Columbia and Bolivia for the training, which focused on the implementation of the health education lessons that the BYU team has developed. Community workers received training that will influence the health status of young children in developing settings.	4	\$4,582
A student of Dr. Ali Crandall attended the National Council on Family Relations annual conference in San Diego, CA. The conference brings family scholars in multiple disciplines together to discuss the latest in family research. The student attended as part of a team who had a paper accepted for a lightning oral presentation and also for her work as a families and public health research assistant. The presentation was on applying Maslow's Hierarchy of Needs to adolescent depression.	1	\$990
Two of Dr. Ali Crandall's students attended the American Public Health Association annual meeting in San Diego, CA. It is the premier conference for public health professionals in the U.S. The students presented at a roundtable discussion on their research on the Theory of Planned Behavior and Mindfulness Meditation among college students.	2	\$2,273
Three undergraduate students, who had completed the public health evaluation course, and Dr. Thackeray attended and presented at the 2018 American Evaluation Association Conference in Cleveland, OH. The students presented an interactive breakout session about writing evaluation questions. Students learned the process of	3	\$3,418

BYU Department of Public Health

Experiential Learning 2018-2019		
submitting an abstract and how to preparation successfully give an effective conference presentation.		
One student of Dr. Chantel Sloan presented a poster at the APHA conference in San Diego, CA. The presentation detailed a geospatial analysis of health disparities and opioid addiction in the US. Her presentation was very successful. She received business cards from people at various institutions, and feedback that she should turn her poster into a paper.	1	\$1,433
Students attended the USOPHE Conference in Provo, UT	16	\$525
Students attend the USOPHE Conference and compete in case study competition. The team took first place in competition and now get to compete at national case study competition.	3	\$90
Students attended the national SOPHE conference in Salt Lake City and competed in the case study competition. The team took first place	3	\$990
Supplies for wellness activities for Public Health students participating in the Public Health Europe Study Abroad Program with Drs. Crookston, West, and Hall.	26	\$10,488
Students attended the national SOPHE conference in Salt Lake City.	5	\$1,344
Dr. Alisha Redelf's student attended a 3-day Summer Evaluation Institute by the American Evaluation Association (AEA) in Atlanta, GA in June 2019. She would participate in 20 hours of workshops (5 x 4 hrs. each) to learn about various new methodologies and best practices. A lot of the work she is doing for me now is data visualization, and the top three scholars in this area teach workshops at the AEA Summer Institute. It would directly build her skill base for the research we are doing, as well as expose her to field of evaluation in general.	1	\$1,200
Student was a Model UN team member in New York, March 22-31. Teaches basic principles of diplomacy. Representing World Health Organization because of major. Get to use knowledge in Data Analysis, Substance Abuse and addictive behaviors, and diseases and their determinants.	1	\$1,200
Dr. Lori Spruance's student presented at Society of Nutrition Education and Behavior in July in Orlando, Florida.	1	\$1,200
Dr. Lori Spruance's student presented at American Academy of Health Behavior conference in Greenville, South Carolina in March.	1	\$1,730
Dr. Jeff Glenn hired three teaching assistants to develop new course teaching materials for HLTH 316. The main project will be a multimedia teaching case that I plan to use each semester in my class. I'm requesting additional funds because the time and engagement required go well above the typical responsibilities for teaching assistants.	3	\$1,083

BYU Department of Public Health

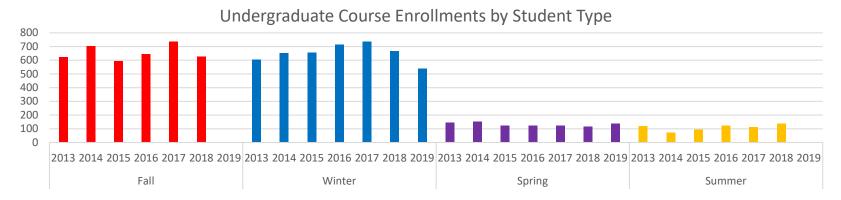
Experiential Learning 2018-2019

Dr. Steve Thygerson took students currently in the OH/EH emphasis and/or ASSP student club to Salt Lake City to conduct noise sampling at several facilities of The Church of Jesus Christ of Latter- Day Saints. Sampling took place over two days at the clothing facility, imaging and printing, and wet and dry canneries. The trip also included unique tours given by the Church's Risk Management Department to illustrate the health and safety issues at Church headquarters. Students developed reports and presented findings at the annual Risk Management conference for the Church. Dr. Steve Thygerson took students taking part in the Nepal Global	20	\$1,824 \$1,100
Health Internship to conduct material/child health surveys with One Heart Worldwide and brick kiln inspections with Better Brick Nepal.	2	\$1,100
Dr. Jim Johnston took students to Minneapolis, Minnesota to attend the American Industrial Hygiene Association Conference (AIHce) from May 20-22. Students presented posters.	6	\$9,296
Travel stipends (matched by the College) for students participating with Dr. Randy Page in the various Global Health Internship Programs located in 10-11 different countries – Rwanda, Zambia, Uganda, Ghana, Argentina, Mexico, Vietnam/Thailand, Spain, Portugal, and Greece.	20	\$9,900
Students of Dr. Ali Crandall attended and presented at the UPHA conference in Utah.	2	\$190
Student of Dr. Cougar Hall attended and presented a poster at The Art and Science of Health Promotion Conference at Hilton Head, South Carolina. The presentation was on BMI and Body Weight Perceptions.	1	\$220
Drs. Mike Barnes and Robbie Chaney took students to Washington, DC for a 2-day advocacy conference hosted by SOPHE to learn how to advocate. Students developed advanced skills for doing public health advocacy work and met with their Congressional leaders. We also presented a 45 minutes workshop on our in-class project used in HLTH 432.	7	\$8,917
TOTAL		\$69,720

BYU Department of Public Health

Percentage of Non- Public Health Majors Enrolled in Selected Service Courses

	Fall							Winter						Spring							Summer							
	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019
HLTH 201	72	71	46	62	86	94		28	30	26	47	32	29	31														
HLTH 320	149	171	154	150	145	141		128	150	142	135	128	122	145	36	33	33	25	20	10	23	39	35	37	36	19	24	
HLTH 335	110	136	143	178	190	184		79	82	120	191	186	169	165	18	13	20	27	27	30	33			4	35	35	29	
HLTH 345	102	138	108	111	118	59		136	153	147	131	144	137	8	33	32	25	19	24	7	4	60	38	51	46	29	50	
HLTH 370								21							14							19						
HLTH 382								15	22	16	7	11	8	10														
HLTH 383	59	57	56	58	68	60		55	61	61	62	66	104	40		30	12	12	24	23	27					16	12	
HLTH 460	57	55	61	59	99	55		118	128	132	135	149	73	97	30	28	20	20	11	29	24							
HLTH 466	31	28						24	26	11	5	18	22	37					1						1	1		
HLTH 481														0				11	16	13	25				4	11	18	
Total	623	701	594	646	737	625	0	604	652	655	713	734	666	537	144	151	121	122	124	114	136	119	73	92	122	112	137	0

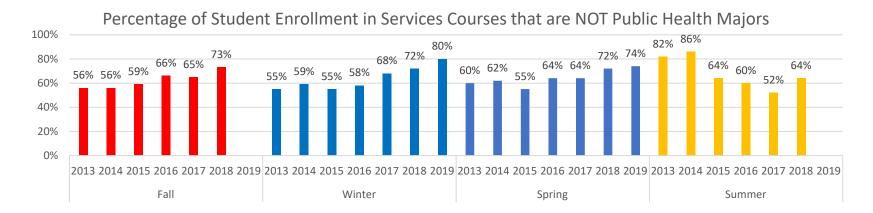


1. Data was pulled on 6/8/2019 by the SAAS report system at BYU

BYU Department of Public Health

Percentage of Non- Public Health Majors Enrolled in Selected Service Courses

	Fall					Winter					Spring					Summer												
	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019
HLTH 201	99%	96%	100%	100%	97%	99%		100%	100%	100%	100%	97%	100%	100%														
HLTH 320	93%	89%	95%	95%	95%	97%		90%	89%	92%	94%	94%	98%	93%	83%	91%	97%	92%	95%	90%	91%	85%	80%	92%	86%	84%	88%	
HLTH 335	37%	36%	42%	53%	52%	60%		9%	44%	51%	50%	58%	47%	61%	33%	39%	15%	41%	52%	53%	46%			50%	57%	57%	66%	
HLTH 345	36%	51%	21%	19%	21%	12%		24%	37%	26%	23%	31%	27%	75%	30%	75%	40%	53%	42%	86%	75%	50%	92%	51%	30%	31%	34%	
HLTH 370								86%							93%							95%						
HLTH 382								27%	46%	31%	43%	82%	75%	100%														
HLTH 383	46%	60%	70%	71%	66%	88%		44%	46%	56%	76%	83%	82%	95%		50%	58%	75%	83%	78%	85%					56%	67%	
HLTH 460	60%	62%	48%	51%	63%	69%		74%	63%	57%	60%	68%	58%	70%	50%	68%	45%	65%	73%	69%	67%							
HLTH 466	32%	18%						46%	46%	27%	20%	28%	64%	76%					0%						100%	0%		
HLTH 481														0				46%	69%	77%	80%				25%	36%	56%	
Average	56%	56%	59%	66%	65%	73%		55%	59%	55%	58%	68%	72%	80%	60%	62%	55%	64%	64%	72%	74%	82%	86%	64%	60%	52%	64%	



1. Data was pulled on 6/8/2019 by the SAAS report system at BYU



Department of Public Health

B.S. in Public Health

Complete the following department courses (all emphases):

HLTH 210—Foundations of Public Health (3.0)

HLTH 312—Introduction to Planning, Interventions, and Evaluation (3.0) HTLH 313—Introduction to Data Collection and Analysis (3.0) HLTH 314—Health, Disease and Their Determinants, Part 1 (3.0) HLTH 315—Health, Disease and Their Determinants, Part 2 (3.0) HLTH 316—Influencing Health through Health Systems and Policy (3.0)

Total Credits: 18.0

Complete the following courses for your selected emphasis:												
Environment		Enidom	iology	· · ·								
Environmenta	al/Occupational	Epidem	lology	пеани гто		Health Science						
Complete the follow		Complete the followin	g courses:	Complete the following		Complete the following courses:						
CHEM 105—General College Chemistry (4.0)	CHEM 106—General College Chemistry (3.0)	HLTH 345—Principles	of Epidemiology (3.0)	HLTH 330—Principles a Promotio	n (3.0)	HTLH 423—Integrating Public Health and Primary Care (3.0)						
CHEM 107—General College Chemistry Lab (1.0)	HLTH 322—Environmental Health (3.0)	HTLH 440—Intro to Sta Epidemiology		HLTH 335—Health Be HLTH 431—Health Comm (3.0	unication and Advocacy	HTLH 425—Working with Vulnerable and Diverse Populations (3.0)						
HLTH 324—Occupation	al Health and Safety (3.0)	HLTH 447—Intro to		HLTH 434—Advanced (3.		HTLH 440—Intro to Statistical Computing in Epidemiology (SAS) (3.0)						
	ntals of Toxicology (3.0)	HLTH 449—Epidemiologic (3.0) F		HLTH 439—Advanced P	rogram Planning (3.0)	HTLH 447—Intro to Biostatistics (3.0)						
F	Exposure Assess Lab I (3.0) Only	MMBIO 221—Genera	l Microbiology (3.0)	STAT 121—Principle	es of Statistics (3.0)	Complete 3.0 hours from the following courses:						
	Exposure Assess Lab II (3.0) Only	STAT 121—Principle		MMBIO 221—Genera	Microbiology (3.0)	HLTH 496R—Academic Internship (3.0) (Public Health, 126 hours)						
MMBIO 221—Genera	al Microbiology (3.0)	PDBIO 220—Human OF PDBIO 210—Human Ana	t	PD BIO 220—Human OR	1	Complete 24.0 hours from the following courses:						
MMBIO 222—General Microbiology Laboratory (1.0)	STAT 121—Principles of Statistics (3.0)	Complete 3.0 hours from	n the following:	PD BIO 210—Human Ana	toniy (virtual lab) (3.0)	CHEM 105—General College Chemistry (4.0)	CHEM 106—General College Chemistry (3.0)					
		HLTH 493—Epidemic	logy Capstone (3.0)			CHEM 107—General						
Complete 3.0 hours fr	emic Internship: (3.0)	W Or	nly	Complete 6.0 hours from	n the following	College Chemistry	CHEM 351—Organic Chemistry (3.0)					
	tional Health, 126 hours)			courses:		Laboratory (1.0)	Chemistry (5.0)					
Complete 9.0 hours fr courses:	om the following	Complete 12.0 hours fr	om the following	HLTH 496R—Academic In Promotion, 2		CHEM 352—Organic Chemistry (3.0)	CHEM353—Organic ChemistryLab (2.0)					
CHEM 223—Quantitativ Analysis (4		HLTH 434—Advanced Evaluation Methods (3.0)	HLTH 439— Advanced Program Planning (3.0)	Complete 6.0 hours of the following courses:		CHEM 481—Biochemistry (3.0)	GEOG 310—Intro to Urban and Regional Planning (3.0)					
CHEM 285—Introductory B (4.0) (CHEM		HLTH 482—Medical Geography (3.0)	HLTH 491R—Mentored Research (3.0v)	HLTH 322— Environmental Health (3.0)	HLTH 403R— Special Topics (5.0v)	MMBIO 121—General Biology: Health and Disease (3.0)	MMPIO 221 Gamaral					
GEOG 101—Global Environment (3.0)	GEOG 303—Biogeography (3.0)	HLTH 492R—Directed Public Health Readings (3.0v)	MATH 112—Calculus 1 (4.0)	HLTH 413—Refugee & Migrant Health (3.0)	HLTH 420—Injury and Violence Prevention (3.0)	MMBIO 222—General Microbiology Laboratory (1.0)	MMBIO 240—Molecular Biology (3.0)					
HLTH 345— Principle	es of Epidemiology (3.0)	MATH 113—Calculus 2 (4.0)	MATH 116— Essentials of Calculus (1.0)	HLTH 422—Disaster Response and Emergency Preparedness (3.0)	HLTH 450— Women's Health Issues (3.0)	MMBIO 241—Molecular and Cellular Biology Laboratory (1.0)	MMBIO 261— Infection and Immunity (3.0)					
HLTH 420—Injury and	Violence Prevention (3.0)	SOC 300—Methods of Research in Sociology (3.0)	STAT 124—SAS Base Programming Skills (1.5)	HLTH 460—Substance Abuse and Addictive Behavior (3.0)	HLTH 466—Health and the Aging Process (3.0) W Only	PD BIO 220—Human OR PD BIO 210—Human Ana	2					
	Response and Emergency Iness (3.0)	STAT 230—Analysis of Variance (3.0)	STAT 234—Methods of Survey Sampling (3.0) F	HLTH 480—International Health (3.0)	HLTH 481 Applied International Health (3.0v)	PDBIO 120—Science of Biology (3.0)	PDBIO 305—Human Physiology (4.0)					
HLTH 481 — Applied In	HLTH 481 — Applied International Health (3.0v)		Only	HLTH 491R—Mentored Research (3.0v)	HLTH 492R Directed Public Health Readings (3.0v)	PDBIO 365— Pathophysiology (4.0)	PWS 340—Genetics (3.0)					
HLTH 482—Medical	Geography (3.0) F Only	STAT 330-Intro to	Regression (3.0)			NDFS 100-Essentials of Human Nutrition (3.0)						
HLTH 491R—Men	tored Research (3.0v)		a en :	Complete 6.0 hours fi	rom the following	Complete one of the following courses:						
HLTH 492R—Directed	MMBIO 261—Infection	Complete 6.0 hours from	HLTH 420—Injury and	courses:								
Public Health Readings (3.0v)	and Immunity (3.0)	HLTH 324— Occupational Health and Safety (3.0)	Violence Prevention (3.0)	MKTG 201—Marketing Management (3.0)	COMMS 235—Intro to Public Relations (3.0)	HLTH 322—Environmental Health (3.0)	HLTH 324—Occupational Health and Safety (3.0)					
MMBIO 418—Virology (3.0)	MMBIO 465—Virology (3.0)	HLTH 450—Women's Health Issues (3.0)	HLTH 460—Substance Abuse and Addictive Behavior (3.0)	HLTH 345—Principles of Epidemiology (3.0)	HLTH 482—Medical Geography (3.0) F Only	HLTH 335—Health Behavior Change (3.0)						
NDFS 361—Food	Microbiology (3.0)	HLTH 466—Health and the Aging Process (3.0) W Only	HLTH 480—International Health (3.0)	HLTH 491R—Mentored Research (3.0v)	HLTH 492R Directed Public Health Readings (3.0v)	HLTH 403R—Special Topics (5.0v)	HLTH 466—Health and the Aging Process (3.0) W Only					
PDBIO 305—Hum	nan Physiology (4.0)	HLTH 481—Applied International Health (3.0v)	NDFS 201—Nutrition & Prevention of Chronic Disease (2.0)	NDFS 100—Essentials of Human Nutrition (3.0)	NDFS 201—Society, Nutrition, and Chronic Disease (2.0)	HLTH 481—Applied International Health (3.0v)	HLTH 482—Medical Geography (3.0) F Only					
PDBIO 365—Pat	hophysiology (4.0)	NDFS 380—Internati	onal Nutrition (3.0)	PDBIO 305—Human	n Physiology (4.0)	HLTH 492R—Directed Public Health Readings (3.0v)						
PWS 150—Environment	tal Biology (3.0)					Recommended MCAT prep courses						
						PHSCS 105/7—General PHSCS 106/8—Genera						
Recommended course		Recommended courses:		Recommended courses:		Physics 1/ Lab (4.0)	Physics 2/ Lab (4.0)					
ENGL 315—Writing in the Social Sciences (3.0)	ENGL 316—Technical Communication (3.0)	ENGL 315—Writing in the Social Sciences (3.0)	ENGL 316—Technical Communication (3.0)	ENGL 315—Writing in the Social Sciences (3.0)	ENGL 316—Technical Communication (3.0)	PSYCH 111—Psychological SOC 111—Introductor Science (3.0) Sociology (3.0)						
Total Credits: 60		Total Credits: 60		Total Credits: 60		Total Credits: 60						

Department Internship Questions: Stephanie Lutz, MS, office 2060B LSB, <u>stephanie_lutz@byu.edu</u>, (801) 422-1943 office, (801) 830-1605 cell Department Advising Questions: Beth Liechty, BS, office 2148 LSB, <u>beth.liechty@byu.edu(801)</u> 422-8950 office, (801) 602-7380 cell Department of Public Health Main Office 4103 LSB, <u>public-health@byu.edu</u>, 801-422-3386, Revised July 2019

BYU Department of Public Health

MPH Curriculum

Suggested Sequence of Courses	Credits
Fall, Year 1	
HLTH 600: Foundations of Public Health & Health Promotion	3
HLTH 602: Principles of Epidemiology	3
HLTH 608: Determinants of Health Behavior	3
HLTH 625: Population-Based Health Promotion Interventions	3
Winter, Year 1	
HLTH 604: Principles of Biostatistics	3
HLTH 606: Environmental Health Sciences	3
HLTH 612: Program Planning & Evaluation	3
HTLH 618: Survey & research Method	3
Spring and/or Summer, Year 1	
HLTH 688R: Field Experience	6
Fall, Year 2	
HLTH 607: Public Health Administration	3
HLTH 619: Infectious and Chronic Disease Prevention & Control	3
HLTH 630: Small-Group Interventions	3
HLTH 690: Public Health Capstone	3
Electives	6
Certified in Public Health (CPH) Exam	
Total Credits	48

Public Health BS Core

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Aligned Public Health Foundations, Systems, and Policy	Direct % of students who score 80% or above on the HLTH 210 Public Health Video Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 12:18:37 By: Emily Eyre	Excellent 100% of students scored 80% or above. Updated: 2019-05-14 15:45:40 By: Emily Eyre	TakenFor all Learning OutcomesIn Fall 2018 we specified acompletely revamped set ofprogram-level learning outcomes(see left-most column of thistable) and implemented a new setof six core courses for PublicHealth majors:HLTH 210 Foundations of PublicHealthHLTH 312 Introduction toPlanning, Interventions, andEvaluationHLTH 313 Introduction to DataCollection and AnalysisHLTH 314 Health, Disease, andTheir Determinants, Part 1HLTH 315 Health, Disease, andTheir Determinants, Part 2HLTH 316 Influencing Healththrough Health Systems andPolicyAs of April 2019, we now havetwo semesters of experience withthese new courses. We will addplanned actions for the 2019-2020academic year after drawing

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			conclusions based on Fall 2018 and Winter 2019 assessments data.
			Updated: 2019-05-14 15:46:02 By: Emily Eyre

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			Planned Short-term Plan:
			 Add Hlth 100 (now Hlth 210 in the list of prerequisites or core and emphasis-specific publc health courses that require the completion of Hlth 210. This will allow students who have completed Hlth 100 under the old curriculum to enroll these classes without havin their enrollment placed on hold.
			Long-term Plan:
			 The new curriculum, which included Health 210, was rolled out for the first time last Fall 2018. However, wi some forthcoming changes on teaching load and the university's plan to expand student enrollment, it is possible that Hlth 210 may be offered in the future as a online class.
			Updated: 2019-06-20 14:39:25 By: Len Novilla

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the HLTH 210 Public Health Infographic Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 12:18:43 By: Emily Eyre	Excellent 95% of students scored 80% or above. Updated: 2019-05-13 14:34:01 By: Emily Eyre	Planned Short-term Plan: • Add Hlth 100 (now Hlth 210) in the list of prerequisites of core and emphasis-specific publc health courses that require the completion of Hlth 210. This will allow students who have completed Hlth 100 under the old curriculum to enroll i these classes without having their enrollment placed on hold.
			 Long-term Plan: The new curriculum, which included Health 210, was rolled out for the first time last Fall 2018. However, with some forthcoming changes on teaching load and the university's plan to expand student enrollment, it is possible that Hlth 210 may be offered in the future as an online class. Updated: 2019-06-20 14:40:00 By: Len Novilla

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the HLTH 316 Country Health Systems Analysis Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70%	Excellent 94% of students scored 80% or above. Updated: 2019-05-13 14:34:47 By: Emily Eyre	Planned Based on two semesters of teaching Hlth 316: • Review assignments required for the class to align them better with course assessments. Updated: 2019-06-21 13:29:01 By: Len Novilla
Alizzad	Updated: 2019-05-17 12:18:49 By: Emily Eyre	Fuedlant	Diamod
Aligned Determinants of Health • Analyze the influence of socio-economic, behavioral, biological, environmental, and other factors that impact human health and contribute to health disparities	Direct % of students who score 80% or above on the HLTH 314 Final Course Grade Excellent = 90% - 100% Good = 80% - 89%	Excellent 97% of students scored 80% or above. Updated: 2019-05-13 14:35:35 By: Emily Eyre	Planned To promote depth in the students' understanding and appreciation of the major concepts of health, determinants, and diseases and to better align the course learning outcomes with course assessments in HIth 314:
to health disparities. • Discuss the underlying science of human health and disease including opportunities for promoting and protecting health across the life course. Updated: 2019-05-17 12:24:32 By: Emily Eyre	Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 12:18:54 By: Emily Eyre		 Focus on 3 major units: Environmental Health, Infectious Diseases, and Chronic Diseases and align the course assessments number of exams with these major units of study; Improve the integration of health behavior change theories and levels of
Good			theories and levels of prevention, social

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			determinants of health,
			socioecological models, and
			Life Course perspective by
			using these linking concept
			in the study of specific
			diseases and public health;
			3. Introduce a focus on
			vulnerable or marginalized
			populations (such as
			women, elderly, racial/ethn
			minorities, LGBTQ, etc) as
			vehicle for teaching
			determinants of health.
			1. De-emphasize the role of
			mass media in public healt
			in the HLTH 314 curriculum
			and look for other courses
			where this topic could best
			be emphasized. This can b
			done by dropping or
			modifying the letter to edite
			and new release
			assignments.
			2. Reduce the number of maj
			assignments to 4 that
			include the following:
			Annotated bibliography;
			Environmental/Disease Brie
			Biographical
			Narrative/Interview; and
			Health Goals & Reflection;
			and
			3. Introduce learning activities
			during class discussions to

xpected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			help increase the students
			interest and understanding
			Updated: 2019-06-28 08:22:22 By: Emily Eyre
	Direct	Fair	Planned
	% of students who score 80% or	72% of students score 80% or	Based on two semesters of
	above on the	above.	teaching HIth 313, continue to
	HLTH 315 Cumulative Quizzes (Sloan)	Updated: 2019-05-17 12:20:43 By: Emily Eyre	require the assignments and exams for HIth 313 as designed
	Excellent = 90% - 100%		Updated: 2019-06-21 13:31:25 By: Len Novilla
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = below 70%		
	Updated: 2019-05-17 12:19:00 By: Emily Eyre		
	Direct	Excellent	Planned
	% of students who score 80% or	100% of students score 80% or	Based on two semesters of
	above on the	above.	teaching HIth 313, continue to
	HLTH 315 Final Project (Sloan)	Updated: 2019-05-14 15:39:40 By: Emily Eyre	require the assignments and exams for HIth 313 as designed
	Excellent = 90% - 100%		Updated: 2019-06-21 13:31:44
	Good = 80% - 89%		By: Len Novilla
	Fair = 70% - 79%		
	Poor = below 70%		
	Updated: 2019-05-17 12:19:05		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the HLTH 315 Midterm Exams (Johnston) Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70%	Fair 76% of students scored 80% or above. Updated: 2019-05-17 12:21:47 By: Emily Eyre	 Planned 1. Deepen the discussion on mental health especially of depression and suicide in males. 2. Focus on the causes and prevention of suicide especially in males. Updated: 2019-06-21 12:48:11 By: Len Novilla
	Updated: 2019-05-17 12:19:10 By: Emily Eyre	Fair	_
	% of students who score 80% or above on the HTLH 315 Final Exam (Johnston) Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 12:19:18 By: Emily Eyre	72% of students scored 80% or above. Updated: 2019-05-17 12:22:22 By: Emily Eyre	 Deepen the discussion on mental health especially or depression and suicide in males. Focus on the causes and prevention of suicide especially in males. Updated: 2019-06-21 12:48:20 By: Len Novilla
Aligned Effective Communication • Access valid information			

about health.

 Disseminate public health Expected Learning Outcomes information using written, visual, and oral 	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
communication.			
	Direct	Good	Planned
Updated: 2019-05-17 12:24:56 By: Emily Eyre	% of students who score 80% or	82% of students scored 80% or	Based on two semesters of
	above on the	above.	teaching HIth 316:
Good	HLTH 316 Policy Analysis Part 2	Updated: 2019-05-17 12:22:30 By: Emily Eyre	Review assignments required for the class to align
	Excellent = 90% - 100%		them better with course assessments.
	Good = 80% - 89%		
	Fair = 70% - 79%		Updated: 2019-06-21 13:29:25 By: Len Novilla
	Poor = below 70%		By. Len Novilla
	Updated: 2019-05-17 12:19:23 By: Emily Eyre		
	Direct	Good	Planned
	% of students who score 80% or above on the	89% of students scored 80% or above.	Based on two semesters of teaching HIth 316:
	HLTH 316 Final Policy Memo		Review assignments
		Undeted: 0010 05 17 10:00:25	required for the class to alig
	Excellent = 90% - 100%	Updated: 2019-05-17 12:22:35 By: Emily Eyre	them better with course assessments.
	Good = 80% - 89%		assessments.
	Fair = 70% - 79%		Updated: 2019-06-21 13:29:39
	Poor = below 70%		By: Len Novilla
	Updated: 2019-05-17 12:19:29 By: Emily Eyre		
	Direct	Excellent	Planned
	% of students who score 80% or above on the	97% of students scored 80% or above.	To promote depth in the students' understanding and appreciation o
	HLTH 314 Environmental Brief	Updated: 2019-05-13 14:38:32 By: Emily Eyre	major concepts and to better align the course learning outcomes with course assessments in Hlth 314:

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Excellent = 90% - 100%		1. Reduce the number of units
	Good = 80% - 89%		from 4 to 3: Environmental
	Fair = 70% - 79%		Health, Infectious Diseases,
			and Chronic Diseases;
	Poor = below 70%		2. Use the concepts on Health
	Updated: 2019-05-17 12:19:34 By: Emily Eyre		Behavior Change and Leve of Prevention to link the
			concepts discussed under
			the 3 major units on
			Environmental Health,
			Infectious Diseases, and
			Chronic Diseases;
			3. Reduce the number of
			exams from 5 to 4;
			4. Reduce the number of major assignments to 4: Annotate
			bibliography;
			Environmental/Disease Brie Biographical
			Narrative/Interview; and
			Health Goals & Reflection; and
			5. Introduce learning activities
			during class discussions to
			help increase the students'
			understanding.
			Updated: 2019-06-21 12:49:08 By: Len Novilla
	Direct	Excellent	
	% of students who score 80% or above on the	99% of students scored 80% or above.	
	HLTH 314 Biographical Narrative	Updated: 2019-05-13 14:39:10 By: Emily Eyre	

By: Len Novilla

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Aligned	Direct	Excellent	Planned
Data Collection and Analysis	% of students who score 80% or	100% of students scored 80% or	Based on two semesters of
Design data collection	above on the	above.	teaching HIth 313, continue to
instrument and collect data.Analyze and interpret data,	HLTH 313 Qualitative Term Project (Chaney)	Updated: 2019-05-13 14:39:47 By: Emily Eyre	require the assignments and exams for HIth 313 as designed
including primary and secondary data.	Excellent = 90% - 100%		Updated: 2019-06-21 13:31:59 By: Len Novilla
Updated: 2019-05-14 15:47:03	Good = 80% - 89%		
By: Emily Eyre	Fair = 70% - 79%		
Good	Poor = below 70%		
	Updated: 2019-05-17 12:19:45 By: Emily Eyre		
	Direct	Excellent	Planned
	% of students who score 80% or above on the	100% of students scored 80% or above.	Based on two semesters of teaching HIth 313, continue to
	HLTH 313 Quantitative Term Project (Chaney)	Updated: 2019-05-13 14:40:24 By: Emily Eyre	require the assignments and exams for HIth 313 as designed.
	Excellent = 90% - 100%		Updated: 2019-06-21 13:32:08 By: Len Novilla
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = below 70%		
	Updated: 2019-05-17 12:19:50		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the HLTH 313 Midterm Exams Excellent = $90\% - 100\%$ Good = $80\% - 89\%$ Fair = $70\% - 79\%$ Poor = below 70% Updated: 2019-05-17 12:19:56 By: Emily Eyre	Excellent 96% of students scored 80% or above. Updated: 2019-05-13 14:40:58 By: Emily Eyre	Planned Based on two semesters of teaching Hlth 313, continue to require the assignments and exams for Hlth 313 as designed. Updated: 2019-06-21 13:32:19 By: Len Novilla
	Direct % of students who score 80% or above on the HLTH 313 Final Exam	Fair77% of students scored 80% or above.Updated: 2019-05-17 12:22:45 By: Emily Eyre	Planned Based on two semesters of teaching Hlth 313, continue to require the assignments and exams for Hlth 313 as designed.
	Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79%		Updated: 2019-06-21 13:32:30 By: Len Novilla
	Poor = below 70% Updated: 2019-05-17 12:20:01 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the HLTH 313 Excel Graph Assignment (Merrill) Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 12:20:07 By: Emily Eyre	Poor 65% of students scored 80% or above. Updated: 2019-05-17 12:22:52 By: Emily Eyre	Planned Based on two semesters of teaching HIth 313, continue to require the assignments and exams for HIth 313 as designed. Updated: 2019-06-21 13:32:40 By: Len Novilla
 Aligned Program Planning and Evaluation Discuss needs assessments and their application to designing effective interventions. Apply intervention strategies to public health problems and evaluation approaches for program development, improvement, and effectiveness. Collaborate with partners. 	Direct % of students who score 80% or above on the HLTH 312 Community Health Assessment Plan Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 12:20:12 By: Emily Eyre	Good 80% of students scored 80% or above. Updated: 2019-05-17 12:23:05 By: Emily Eyre	Planned Based on two semesters of teaching HIth 312, continue to require the assignments and exams for HIth 312 as designed Updated: 2019-06-20 15:47:52 By: Len Novilla
Updated: 2019-05-17 12:25:45 By: Emily Eyre Good			

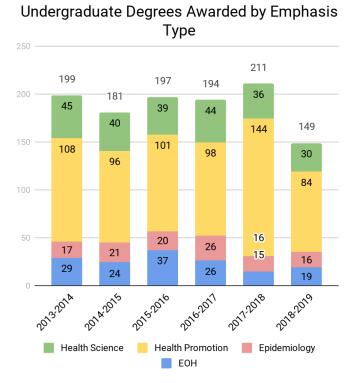
Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Good	Planned
	% of students who score 80% or above on the	89% of students scored 80% or above.	Based on two semesters of teaching HIth 312, continue to
	HLTH 312 Best Practices Application and Adaption	Updated: 2019-05-17 12:23:11 By: Emily Eyre	require the assignments and exams for Hlth 312 as designed
	Excellent = 90% - 100%		Updated: 2019-06-20 15:48:25 By: Len Novilla
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = below 70%		
	Updated: 2019-05-17 12:20:17 By: Emily Eyre		
	Direct	Excellent	Planned
	% of students who score 80% or above on the	93% of students scored 80% or above.	Based on two semesters of teaching HIth 312, continue to
	HLTH 312 Logic Model Assignment	Updated: 2019-05-13 14:44:07 By: Emily Eyre	require the assignments and exams for HIth 312 as designed
	Excellent = 90% - 100%		Updated: 2019-06-20 15:48:44 By: Len Novilla
	Good = 80% - 89%		
	Fair = $70\% - 79\%$		
	Poor = below 70%		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the	Excellent 100% of students scored 80% or above.	Planned Based on two semesters of teaching Hlth 316:
	HLTH 316 Policy Analysis Part 1: Problem Definition Excellent = 90% - 100%	Updated: 2019-05-13 14:46:38 By: Emily Eyre	 Review assignments required for the class to align them better with course assessments.
	Good = 80% - 89% Fair = 70% - 79%		Updated: 2019-06-21 13:30:00 By: Len Novilla
	Poor = below 70% Updated: 2019-05-17 12:20:29 By: Emily Eyre		

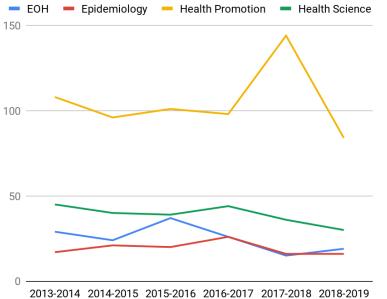
BYU Department of Public Health

Undergraduate Degrees Awarded, by Emphasis

Major: Emphasis	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Public Health: Environmental/Occupational Health Emphasis	29	24	37	26	15	19
Public Health: Epidemiology Emphasis	17	21	20	26	16	16
Public Health: Health Promotion Emphasis	108	96	101	98	144	84
Public Health: Health Science Emphasis	45	40	39	44	36	30
Total	199	181	197	194	211	149



Undergraduate Degrees Awarded by Emphasis



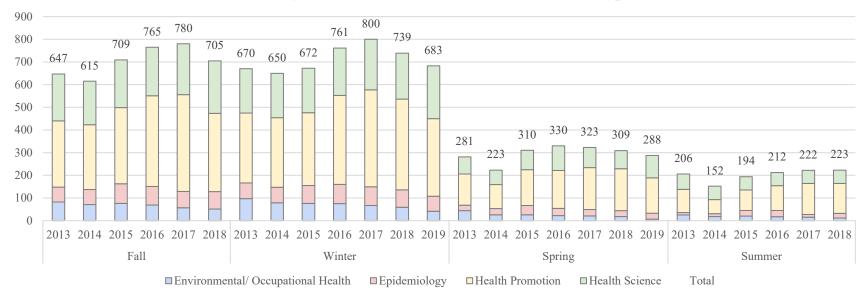
1. Data was pulled on 6/8/2019 by the SAAS report system at BYU

BYU Department of Public Health

Undergraduate Course Enrollments, by Emphasis

			Fa	all			Winter				Spring					Summer										
Emphasis	2013	2014	2015	2016	2017	2018	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018	2019	2013	2014	2015	2016	2017	2018
Environmental/ Occupational Health	82	71	76	69	57	51	97	79	76	75	67	59	41	44	26	26	22	21	18	7	25	18	20	17	15	12
Epidemiology	66	66	87	82	72	77	69	68	79	85	82	77	67	24	27	41	32	28	26	26	11	13	25	28	12	20
Health Promotion	292	286	336	400	427	345	309	307	321	392	428	400	342	138	106	158	167	185	185	156	102	62	90	109	137	132
Health Science	207	192	210	214	224	232	195	196	196	209	223	203	233	75	64	85	109	89	80	99	68	59	59	58	58	59
Total	647	615	709	765	780	705	670	650	672	761	800	739	683	281	223	310	330	323	309	288	206	152	194	212	222	223

Undergraduate Course Enrollments by Student Type



^{1.} Data was pulled on 6/8/2019 by the SAAS report system at BYU

BYU Department of Public Health

Senior Survey Data

Senior Survey Data					Ac	ader	nic Yea	ar			
		2012	2-2013		013- 014)14- 015)15- 016		016- 017
		N	%	N	%	N	%	N	%	N	%
1. Which of the following best describes what you	Employed full-time in a job related to your major field	49	41%	56	39%	55	46%	59	46%	46	40%
anticipate to be your primary occupation during the first year after you complete	Employed full-time in a job not related to your major field	20	17%	16	11%	15	13%	18	14%	20	17%
your degree?	Employed part-time	4	3%	14	10%	10	8%	9	7%	6	5%
(Choose one.)	Homemaker/stay at home parent	6	5%	6	4%	10	8%	5	4%	4	3%
	Student (pursuing graduate or professional degree)	29	24%	44	31%	28	23%	29	23%	34	30%
	Other job (e.g. internship, self- employed)	5	4%	3	2%	1	1%	1	1%	3	3%
	Don't know	6	5%	3	2%	1	1%	3	2%	2	2%
	Other job (e.g. internship, self- employed)	0	0%	0	0%	0	0%	3	2%	0	0%
	Total	119	100%	142	100%	120	100%	127	100%	115	100%
15. How would you	Poor	2	2%	3	2%	3	3%	2	2%	1	1%
rate your overall educational	Fair	3	3%	10	7%	5	4%	6	5%	11	10%
experience at BYU?	Good	56	48%	46	34%	40	35%	46	36%	50	44%
	Excellent	55	47%	78	57%	67	58%	73	57%	51	45%
	Total	116	100%	137	100%	115	100%	127	100%	113	100%
44. Are you aware of	Yes	71	65%	74	56%	72	65%	76	61%	65	60%
the expected learning outcomes	No	39	35%	57	44%	38	35%	48	39%	43	40%
for your major?	Total	110	100%	131	100%	110	100%	124	100%	108	100%
45. To what extent	Strongly disagree	5	7%	2	3%	2	3%	6	8%	0	0%
do you agree or disagree with the	Disagree	2	3%	1	1%	3	4%	4	5%	3	5%
following	No opinion	6	8%	2	3%	1	1%	2	3%	6	9%

BYU Department of Public Health

Senior Survey Data

statement? 'My	Agree	47	66%	47	64%	47	65%	48	63%	37	57%
academic experiences helped	Strongly agree	11	15%	22	30%	19	26%	16	21%	19	29%
me to achieve the expected learning outcomes for my major.'	Total	71	100%	74	100%	72	100%	76	100%	65	100%
51. If you were	Definitely no	6	6%	11	8%	6	5%	10	8%	11	10%
starting your college career over, would	Probably no	20	18%	21	16%	21	19%	20	16%	17	16%
you choose to	Uncertain	24	22%	23	18%	21	19%	20	16%	19	18%
graduate with the same major?	Probably yes	34	31%	45	35%	37	34%	44	35%	36	33%
Same major :	Definitely yes	25	23%	30	23%	25	23%	30	24%	25	23%
	Total	109	100%	130	100%	110	100%	124	100%	108	100%
57a. Work regularly	0	58	54%	53	42%	62	56%	72	58%	48	45%
with a faculty member outside of	1	16	15%	15	12%	12	11%	20	16%	20	19%
class("Mentored	2	13	12%	29	23%	12	11%	11	9%	12	11%
Student Learning", research, creative	3	8	7%	13	10%	9	8%	8	6%	13	12%
works, etc.)	4+	12	11%	16	13%	15	14%	13	10%	13	12%
	Total	107	100%	126	100%	110	100%	124	100%	106	100%
Notes:											
											4

1. Senior Survey is administered three times during each academic year just prior to the December, April, and August graduations

2. Use caution in interpreting results based on a small N (particularly N < 15).

BYU Department of Public Health

Alumni Questionnaire Data – Undergraduate

Which of the following best describes your current primary occupation? Employed Full-Time Outside My Major 7 24% 21 24% 20 24% 9 11% 28 274 Employed Full-Time Outside My Major 12 17% 21 24% 17 20% 22 28% 28 274 Employed Part-Time Field 12 17% 21 24% 17 20% 22 28% 28 274 Employed Part-Time Field 12 17% 21 24% 17 20% 22 28% 28 274 Full-Time Homemaker 24 34% 21 24% 22 26% 20 25% 18 17 Full-Time Student 7 10% 15 17% 15 18% 17 216 26% 50 100 10 100 10 14 16% 1 16% 1 16% 1 16% 1 16% 1 10% 1 10%											
Senior Survey Data		C	ohort \	/ear	· (Admi	inist	ered 3	-ye	ars Pos	st De	gree)
		2	2010	2	2011	2	2012	2	2013	2	014
		Ν	%	N	%	N	%	N	%	N	%
-		17	24%	21	24%	20	24%	9	11%	28	27%
primary occupation?	Outside My Major	12	17%	21	24%	17	20%	22	28%	28	27%
	Employed Part-Time	9	13%	8	9%	7	8%	9	11%	8	8%
	Fill-Time Homemaker	24	34%	21	24%	22	26%	20	25%	18	17%
	Full-Time Student	7	10%	15	17%	15	18%	17	21%	17	16%
	Unemployed	1	1%	1	1%	3	4%	3	4%	5	5%
	Total	70	100%	87	100%	84	100%	80	100%	104	100%
•	Poor	1	1%	1	1%	2	3%	1	1%	2	2%
•	Fair	1	1%	3	4%	3	4%	5	7%	6	6%
	Good	19	28%	30	35%	24	31%	35	46%	32	31%
	Excellent	47	69%	51	60%	48	62%	35	46%	63	61%
	Total	68	100%	85	100%	77	100%	76	100%	103	100%
	Definitely No	6	9%	10	12%	11	14%	15	19%	16	16%
-	Probably No	18	26%	22	26%	18	23%	27	35%	20	19%
	Uncertain	13	19%	14	17%	18	23%	10	13%	17	17%
	Probably Yes	23	34%	29	35%	20	26%	18	23%	37	36%
	Definitely Yes	8	12%	9	11%	10	13%	7	9%	13	13%
	Total	68	100%	84	100%	77	100%	77	100%	103	100%
	Very Poorly	0	0%	1	3%	0	0%	0	0%	3	7%
•	Poorly	0	0%	3	9%	2	7%	5	20%	7	17%
	Fairly Well	5	28%	8	24%	15	56%	7	28%	11	26%
	Quite Well	8	44%	16	48%	6	22%	9	36%	15	36%
	Extremely Well	5	28%	5	15%	4	15%	4	16%	6	14%
	Total	18	100%	33	100%	27	100%	25	100%	42	100%

BYU Department of Public Health

	~ .			4
Alumni	Duestionn	aire Data –	Inderg	raduate
	Questionn			Juduuto

Describe your activities or plans for further formal	Finished A Bachelor's, No More Schooling	26	38%	17	20%	27	32%	26	33%	29	28%
schooling.	Finished A Bachelor's, Plan on Grad School	24	35%	30	34%	25	30%	24	30%	39	38%
	Finished A Bachelor's, Enrolled in Grad School	9	13%	24	28%	15	18%	17	22%	20	19%
	Finished A Grad Degree, No More Planned	5	7%	8	9%	13	15%	6	8%	11	11%
	Finished A Grad Degree, Planning Another	5	7%	8	9%	4	5%	6	8%	5	5%
	Total	69	100%	87	100%	84	100%	79	100%	104	100%
How effectively did BYU	Very Ineffectively	0	0%	0	0%	0	0%	1	3%	3	8%
prepare you for graduate school?	Ineffectively	0	0%	1	3%	3	9%	1	3%	3	8%
	Effectively	10	53%	19	48%	18	56%	16	55%	20	56%
	Very Effectively	9	47%	20	50%	11	34%	11	38%	10	28%
	Total	19	100%	40	100%	32	100%	29	100%	36	100%
Notes:											
1. The Alumni Questionnaire	e is administered to gradu	uatir	ig coho	orts	three y	/ear	s follo	wing	g their g	gradı	uation
2. Use caution in interpreting	g results based on a sma	ll N	(partic	ular	ly N <	15).					

BYU Department of Public Health

Student Demographics of Enrolled Majors

		Fall Semester
		2018
Total Undergraduate Majors	% Females	68.8
	% US Citizen	75.4
	% LDS	99.8
	Total N	565
Total Graduate Majors	% Females	73.1
	% US Citizen	92.3
	% LDS	100.0
	Total N	26

		Undergraduate
		2018
Public Health	% Females	68.7
	% US Citizen	75.3
	% LDS	99.8
	Total N	562
School Health Education	% Females	100.0
	% US Citizen	100.0
	% LDS	100.0
	Total N	3

		Graduate
		2018
Master of Public Health	% Females	73.1
	% US Citizen	92.3
	% LDS	100.0
	Total N	26

Notes:

1. Data is as of the 3rd week of Fall Semester

2. Students receiving multiple degrees will have their degrees counted in each discipline in which they were awarded.

3. Differences between counts from department "Total N" and program "Total N" result from students having multiple primary degrees within the same departments as designated by Academic Information Management (AIM) system. Thus, the "Total N" within Total Undergraduate Majors, and/or Total Graduate Majors if applicable provides an accurate non-duplicated headcount

Public Health BS Health Promotion

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned		
Aligned	Direct	Good	Planned		
Assess Needs	% of students who score 80% or	80% of students scored 80% or	We are happy with this area and		
Conduct an assessment of	above on the	above.	have no immediate plans.		
community needs, assets, and nealth problems.	HLTH 312 Community Health Assessment Plan	Updated: 2019-05-17 12:05:07 By: Emily Eyre	Updated: 2019-06-14 14:22:47 By: Josh West		
Jpdated: 2019-05-17 11:27:33					
y: Emily Eyre	Excellent = 90% - 100%				
Good	Good = 80% - 89%				
	Fair = 70% - 79%				
	Poor = Less than 70%				
	Updated: 2019-05-17 12:08:30 By: Emily Eyre				
	Direct	Good	Planned		
	% of students who score 80% or	82% of students scored 80% or	We are happy with this area and		
	above on the HLTH 439 Consultation #1	above. Updated: 2019-05-17 12:08:38 By: Emily Eyre	have no immediate plans. Updated: 2019-06-14 14:22:57 By: Josh West		
	Excellent = 90% - 100%				
	Good = 80% - 89%				
	Fair = 70% - 79%				
	Poor = Less than 70%				
	Updated: 2019-05-17 12:08:24 By: Emily Eyre				

Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Direct % of students who score 80% or above on the HTLH 439 Final Program Plan Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = Less than 70% Updated: 2019-05-17 12:08:48 By: Emily Eyre	Excellent 98% of students scored 80% or above. Updated: 2019-05-17 12:08:52 By: Emily Eyre	Taken We modified the final course project to include completion of an PowerPoint presentation for community assessment, infographic for the intervention plan infographic, and an implementation and evaluation guide. Updated: 2019-06-14 14:17:11 By: Josh West
Direct % of students who score 80% or above on the HLTH 480 Country Project: Introduction Assignment	Excellent 100% of students scored 80% or above. Updated: 2019-05-17 12:09:09 By: Emily Eyre	
Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = Less than 70% Updated: 2019-05-17 14:25:39 By: Emily Eyre		
	% of students who score 80% or above on the HTLH 439 Final Program Plan Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = Less than 70% Updated: 2019-05-17 12:08:48 By: Emily Eyre Direct % of students who score 80% or above on the HLTH 480 Country Project: Introduction Assignment Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = Less than 70% Updated: 2019-05-17 14:25:39	% of students who score 80% or above on the98% of students scored 80% or above.HTLH 439 Final Program Plan98% of students scored 80% or above.HTLH 439 Final Program PlanUpdated: 2019-05-17 12:08:52 By: Emily EyreExcellent = 90% - 100% Good = 80% - 89%Fair = 70% - 79% Poor = Less than 70%Poor = Less than 70%Updated: 2019-05-17 12:08:48 By: Emily EyreDirectExcellent 100% of students scored 80% or above.MLTH 480 Country Project: Introduction AssignmentUpdated: 2019-05-17 12:09:09 By: Emily EyreExcellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = Less than 70% Updated: 2019-05-17 14:25:39

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Indirect At least 85% of students feel competent, very competent, or extremely competent in the learning outcome on the Senior Survey Updated: 2019-04-03 11:04:36 By: Emily Eyre		
Aligned Plan Programs Design goals, objectives and interventions based on assessment data. Updated: 2019-05-17 11:27:55 By: Emily Eyre Good	Direct % of students who score 80% or above on the HLTH 312 Best Practices Applicaton and Adaptation Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = Less than 70% Updated: 2019-07-03 09:49:50 By: Tanya Gale	Good 89% of students scored 80% or above. Updated: 2019-05-17 12:09:26 By: Emily Eyre	

above on theabove.will be the addition oHLTH 335 Application'labs', or out of class	ken or Planned	Actions Taken	s Based on Evidence	Conclusions Base	ts Indirect Evidence)	ed Learning Outcomes
above on theabove.will be the addition on labsi, or out of class applications of the the goal of improving ability to plan prograin interventions.AssignmentsUpdated: 2019-05-17 11:28:50 By: Emily Eyrewill be the addition on labsi, or out of class applications of the the goal of improving ability to plan prograin interventions.Good = 80% - 89% Fair = 70% - 79%Updated: 2019-05-17 11:28:50 By: Emily EyreUpdated: 2019-06-14 14:1 		Planned		Good		
HLTH 335 Application AssignmentsUpdated: 2019-05-17 11:26:50 By: Emily Eyre'labs', or out of class applications of the tr the goal of improving ability to plan progra interventions.Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79%Updated: 2019-06-14 14:1 By: Josh WestUpdated: 2019-06-14 14:1 By: Josh WestPoor = Less than 70% Updated: 2019-05-17 11:209:35 By: Emily EyreExcellentPlannedDirectExcellent 93% of students scored 80% or above.PlannedMTLH 431 Applied Communication AssignmentsUpdated: 2019-05-16 10:48:41 By: Emily EyreUpdated: 2019-06-14 14:2 By: Josh WestExcellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79%Excellent = 90% - 70%Updated: 2019-05-16 10:48:41 By: Emily Eyre	ming semesters there	-	ents scored 80% or			
Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79%interventions. Updated: 2019-06-14 14:1 By: Josh WestPoor = Less than 70% Updated: 2019-05-17 12:09:35 By: Emily EyreUpdated: 2019-06-14 14:1 By: Josh WestDirect % of students who score 80% or above on the HTLH 431 Applied Communication AssignmentsExcellent 93% of students scored 80% or above.Planned We are happy with th have no immediate p Updated: 2019-05-16 10:48:41 By: Emily EyreExcellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79%Excellent = 90% - 700%	ut of class, real-world s of the theories with improving students'	'labs', or out of applications of the goal of imp	05-17 11:26:50	Updated: 2019-05-17 1	Application	
Fair = 70% - 79% Dipdated: 2019-06-14 14:1 Poor = Less than 70% Updated: 2019-05-17 12:09:35 By: Emily Eyre Excellent Direct 93% of students scored 80% or above on the HTLH 431 Applied Updated: 2019-05-16 10:48:41 Communication Assignments Updated: 2019-05-16 10:48:41 By: Emily Eyre Updated: 2019-05-16 10:48:41 By: Josh West Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79%					90% - 100%	
Poor = Less than 70%Updated: 2019-05-17 12:09:35 By: Emily EyreDirectExcellent% of students who score 80% or above on the93% of students scored 80% or above.PlannedHTLH 431 Applied Communication AssignmentsUpdated: 2019-05-16 10:48:41 By: Emily EyreUpdated: 2019-06-14 14:22 By: Josh WestExcellent = 90% - 100% 	9-06-14 14:19:21	Updated: 2019-06-			~ - 89%	
Updated: 2019-05-17 12:09:35 By: Emily EyreDirectExcellentPlanned% of students who score 80% or above on the93% of students scored 80% or above.We are happy with the have no immediate p Updated: 2019-05-16 10:48:41 By: Emily EyreUpdated: 2019-06-14 14:22 By: Josh WestExcellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79%Students with a state of the		By: Josh West			- 79%	
above on theabove.have no immediate pHTLH 431 Applied Communication AssignmentsUpdated: 2019-05-16 10:48:41 By: Emily EyreUpdated: 2019-06-14 14:22 By: Josh WestExcellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79%Good = 80% - 79%						
above on theabove.have no immediate pHTLH 431 Applied Communication AssignmentsUpdated: 2019-05-16 10:48:41 By: Emily EyreUpdated: 2019-06-14 14:22 By: Josh WestExcellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79%Good = 80% - 79%Fair = 70% - 79%		Planned		Excellent		
Communication Assignments Opdated. 2019-05-18 10.46.41 Opdated. 2019-05-18 10.46.41 By: Emily Eyre By: Josh West Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Fair = 70% - 79%			ents scored 80% or			
Good = 80% - 89% Fair = 70% - 79%			05-16 10:48:41			
Fair = 70% - 79%					90% - 100%	
					% - 89%	
Poor = Less than 70%						
					s than 70%	
Updated: 2019-05-17 12:09:46 By: Emily Eyre					-05-17 12:09:46	

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Good	Planned
	% of students who score 80% or	89% of students scored 80% or	We are happy with this area and
	above on the HLTH 439 Consultation #2	above. Updated: 2019-05-17 11:26:56 By: Emily Eyre	have no immediate plans. Updated: 2019-06-14 14:25:19 By: Josh West
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = Less than 70%		
	Updated: 2019-05-17 12:10:02 By: Emily Eyre		
	Direct	Excellent	Planned
	% of students who score 80% or above on the	98% of students scored 80% or above.	We are happy with this area and have no immediate plans.
	HLTH 439 Final Program Plan	Updated: 2019-05-13 13:58:05 By: Emily Eyre	Updated: 2019-06-14 14:25:31 By: Josh West
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = Less than 70%		
	Updated: 2019-05-17 12:10:16 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Indirect At least 85% of students feel competent, very competent, or extremely competent in the learning outcome on the Senior Survey Updated: 2019-04-03 11:06:02 By: Emily Eyre		
Aligned Implement Interventions Implement effective interventions including mass media, electronic technology, and public health policy. Updated: 2019-05-16 10:49:41 By: Emily Eyre Excellent	Direct % of students who score 80% or above on the HLTH 431 Applied Advocacy Assignments Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = Less than 70% Updated: 2019-05-17 12:10:29 By: Emily Eyre	Excellent 91% of students scored 80% or above. Updated: 2019-05-16 10:49:33 By: Emily Eyre	Planned We are happy with this area and have no immediate plans. Updated: 2019-06-14 14:25:43 By: Josh West

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Excellent	Planned
	% of students who score 80% or above on the	100% of students scored 80% or above.	We are happy with this area and have no immediate plans.
	HTLH 480 Country Project: Malaria Assignment	Updated: 2019-05-13 13:58:49 By: Emily Eyre	Updated: 2019-06-14 14:25:51 By: Josh West
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = Less than 70%		
	Updated: 2019-05-17 12:10:43 By: Emily Eyre		
	At least 85% of students feel competent, very competent, or extremely competent in the learning outcome on the		
	Senior Survey		
	Updated: 2019-04-03 11:07:21 By: Emily Eyre		
Aligned			
Research and Evaluation			
Design an evaluation of health promotion interventions.			
Jpdated: 2019-05-16 10:49:58 By: Emily Eyre			
Excellent			

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Excellent	Planned
	% of students who score 80% or above on the	93% of students scored 80% or above.	We have concerns that the 434 evaluation plan may not be the
	HLTH 434 - Final Evaluation Plan	Updated: 2019-05-16 10:51:55 By: Emily Eyre	best assessment of student learning. Key Health Promotion faculty will discuss in the coming year a substitution for this direct
	Excellent = 90% - 100%		assessment.
	Good = 80% - 89%		Undeted: 2010 06 14 14:24:53
	Fair = 70% - 79%		Updated: 2019-06-14 14:24:53 By: Josh West
	Poor = Less than 70%		
	Updated: 2019-05-17 12:10:55 By: Emily Eyre		
	Direct	Excellent	Planned
	% of students who score 80% or above on the	92% of students scored 80% or above.	We are happy with this area and have no immediate plans.
	HLTH 439 Consultation #3	Updated: 2019-05-13 14:00:39 By: Emily Eyre	Updated: 2019-06-14 14:26:02 By: Josh West
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = Less than 70%		
	Updated: 2019-05-17 12:11:06 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the HLTH 439 Final Program Plan Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = Less than 70% Updated: 2019-05-17 12:11:23 By: Emily Eyre	Excellent 98% of students scored 80% or above. Updated: 2019-05-13 14:01:11 By: Emily Eyre	Taken We modified the final course project to include completion of an PowerPoint presentation for community assessment, infographic for the intervention plan infographic, and an implementation and evaluation guide. Updated: 2019-06-14 14:27:26 By: Josh West
	Indirect At least 85% of students feel competent, very competent, or extremely competent in the learning outcome on the Senior Survey Updated: 2019-04-03 11:08:29 By: Emily Eyre		

BYU Department of Public Health

Senior Survey Data – Health Promotion

Health Promotion Senior Survey Data

Senior Survey Data		Academic Year									
		2013- 2014		2014- 2015		2015- 2016		2016- 2017		2017- 2018	
		Ν	%	Ν	%	Ν	%	Ν	%	Ν	%
1. Which of the following best describes what you anticipate to be your primary occupation during the first year after you complete your degree? (Choose one.)	Employed full-time in a job related to your major field	32	46%	35	59%	41	66%	25	47%	22	29%
	Employed full-time in a job not related to your major field	12	17%	10	17%	8	13%	10	19%	21	27%
	Employed part-time	10	14%	5	8%	2	3%	4	8%	9	12%
	Homemaker/stay at home parent	3	4%	5	8%	2	3%	4	8%	8	10%
	Student (pursuing graduate or professional degree)	8	12%	2	3%	5	8%	6	11%	11	14%
	Other job (e.g. internship, self- employed)	2	3%	1	2%	0	0%	3	5%	0	0%
	Don't know	2	3%	1	2%	1	2%	1	2%	4	5%
	Other job (e.g. internship, self- employed)	0	0%	0	0%	3	5%	0	0%	2	3%
	Total	69	100%	59	100%	62	100%	53	100%	77	100%
15. How would you rate your overall educational experience at BYU?	Poor	2	3%	1	2%	1	2%	0	0%	0	0%
	Fair	4	6%	2	4%	1	2%	3	6%	4	5%
	Good	23	34%	13	23%	18	29%	28	53%	41	54%
	Excellent	38	57%	40	71%	42	68%	22	42%	31	41%
	Total	67	100%	56	100%	62	101%	53	100%	76	100%
44. Are you aware of the expected learning outcomes for your major?	Yes	39	61%	41	77%	49	80%	36	75%	45	63%
	No	25	39%	12	23%	12	20%	12	25%	27	38%
	Total	64	100%	53	100%	61	100%	48	100%	72	100%
45. To what extent do you	Strongly disagree	2	5%	1	2%	3	6%	0	0%	0	0%
agree or disagree with the	Disagree	0	0%	2	5%	3	6%	1	3%	0	0%

BYU Department of Public Health

Senior Survey Data – Health Promotion

following statement? 'My academic experiences helped me to achieve the expected learning outcomes for my major.'	No opinion	0	0%	0	0%	1	2%	3	8%	3	7%
	Agree	25	64%	28	68%	32	65%	25	69%	31	69%
	Strongly agree	12	31%	10	24%	10	20%	7	19%	11	24%
	Total	39	100%	41	100%	49	100%	36	100%	45	100%
51. If you were starting your college career over, would you choose to graduate with the same major?	Definitely no	6	10%	4	8%	3	5%	1	2%	8	11%
	Probably no	11	17%	7	13%	8	13%	9	19%	17	24%
	Uncertain	10	16%	10	19%	11	18%	8	17%	12	17%
	Probably yes	19	30%	18	34%	23	38%	22	46%	25	35%
	Definitely yes	17	27%	14	26%	16	26%	8	17%	10	14%
	Total	100	100%	53	100%	61	100%	48	100%	72	100%
57a. Work regularly with a faculty member outside of class("Mentored Student Learning", research, creative works, etc.)	0	34	55%	36	68%	36	59%	23	50%	34	48%
	1	8	13%	4	8%	11	18%	8	17%	15	21%
	2	13	21%	5	9%	7	11%	4	9%	8	11%
	3	3	5%	4	8%	3	5%	7	15%	8	11%
	4+	4	6%	4	8%	4	7%	4	9%	6	8%
	Total	62	100%	53	100%	61	100%	46	100%	71	100%
Notes:											

1. Senior Survey is administered three times during each academic year just prior to the December, April, and August graduations

2. Use caution in interpreting results based on a small N (particularly N < 15).

BYU Department of Public Health

Alumni Questionnaire Data – Health Promotion

Health Promotion Alumni Survey Data Senior Survey Data Cohort Year (Administered 3-years Post Degree) 2011 2012 2013 2014 2015 N % N Ν % Ν % % Ν % Which of the following best **Employed Full-Time** 0 0% 3 4 describes your current primary in My Major Field 43% 23% 16 34% 9% 11 occupation? Employed Full-Time Outside My Major Field 0 0% 1 14% 15 33% 14 29% 13 28% **Employed Part-Time** 0 0% 0 0% 5 11% 5 10% 4 9% Fill-Time Homemaker 23% 0 0% 2 29% 15 33% 11 6 13% Full-Time Student 0 0% 0 0% 5 11% 4 8% 11% 5 Unemployed 2 0 0% 1 14% 4% 3 6% 3 6% 0 0% 7 100% 46 100% 48 100% 47 100% Total How would you evaluate your Poor 0 0% 0 0 1 2% 0% 0% 1 2% entire educational experience at Fair 0 0% 0 0% 2 4% 0 0% 4 9% BYU Good 0 0% 2 33% 20 44% 16 34% 10 21% Excellent 0 0% 4 67% 23 51% 30 64% 32 68% 0 0% 6 100% 45 100% 47 100% 47 100% Total If starting over would you choose 0 0% 1 **Definitely No** 17% 8 18% 7 7 15% 15% to graduate with the same Probably No 0 0% 2 33% 15 33% 9 19% 16 34% major? Uncertain 0 0% 1 17% 7 16% 8 17% 7 15% Probably Yes 0 0% 1 17% 10 22% 17 36% 9 19% **Definitely Yes** 0 0% 1 17% 5 11% 6 13% 8 17% Total 0 0% 6 100% 45 100% 47 100% 47 100% How effectively did your Very Poorly 0 0% 0 0% 0 0% 1 5% 1 4% educational experiences at BYU Poorly 0 0% 0 0% 4 27% 3 14% 3 13% prepare you for your current job? Fairly Well 67% 0 0% 2 3 20% 4 19% 7 29% Quite Well 0 0% 1 33% 6 40% 10 48% 9 38% **Extremely Well** 2 0 0% 0 0% 13% 3 14% 4 17% Total 0 0% 3 100% 15 100% 21 100% 24 100%

BYU Department of Public Health

Alumni Questionnaire Data – Health Promotion

Describe your activities or plans for further formal schooling.	Finished A Bachelor's, No More Schooling	0	0%	4	57%	19	42%	16	33%	21	45%
	Finished A Bachelor's, Plan on Grad School	0	0%	3	43%	16	36%	21	44%	8	17%
	Finished A Bachelor's, Enrolled in Grad School	0	0%	0	0%	4	9%	7	15%	9	19%
	Finished A Grad Degree, No More Planned	0	0%	0	0%	3	7%	1	2%	3	6%
	Finished A Grad Degree, Planning Another	0	0%	0	0%	3	7%	3	6%	6	13%
	Total	0	0%	7	100%	45	100%	48	100%	47	100%
How effectively did BYU prepare	Very Ineffectively	0	0%	0	0%	0	0%	2	18%	0	0%
you for graduate school?	Ineffectively	0	0%	0	0%	0	0%	1	9%	0	0%
	Effectively	0	0%	0	0%	6	60%	5	45%	6	33%
	Very Effectively	0	0%	0	0%	4	40%	3	27%	12	67%
	Total	0	0%	0	0%	10	100%	11	100%	18	100%
Notes:											
1. The Alumni Questionnaire is ad	ministered to graduating	g co	ohor	ts t	hree ye	ears	s follow	ing	their g	radı	uation
2. Use caution in interpreting resul	ts based on a small N (par	ticul	arl	y N < 1	5).					

Public Health BS Epidemiology

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Aligned	Direct	Good	
Data Analysis and Presentation	% of students who score 80% or	89% of students scored 80% or	
Analyze and interpret data and	above on the	above.	
present results in words, tables, charts, and graphs.	HLTH 440 Final Data Analysis Project	Updated: 2019-05-17 12:32:01 By: Emily Eyre	
Jpdated: 2019-05-17 11:00:32 By: Emily Eyre	Excellent = 90% - 100%		
	Good = 80% - 89%		
Fair	Fair = $70\% - 79\%$		
	Poor = Less than 70%		
	Updated: 2019-05-17 12:31:15 By: Emily Eyre		
	Direct	Poor	
	% of students who score 80% or	69% of students scored 80% or	
	above on the	above.	
	HLTH 447 - Final Exam	Updated: 2019-05-17 12:32:05 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = Less than 70%		
	Updated: 2019-05-17 12:31:20 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			Planned The epidemiology faculty: • will review the full distribution of exam scores • examine course gpa's across instructors/sections • examine any differences across instructors/sections • consider whether the rigor of the exam is appropriate for the course • evaluate whether specific exam topics constitute a majority of lost points and evaluate associated teaching of these topics. Updated: 2019-06-12 10:40:28 By: Brianna Magnusson
Aligned Epidemiologic Study Design Design epidemiologic studies and compare and contrast study methodology. Updated: 2019-05-13 13:45:55 By: Emily Eyre Good	Direct % of students who score 80% or above on the HTLH 449 – Exams Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = Less than 70% Updated: 2019-05-17 12:31:25 By: Emily Eyre	Fair 70% of students scored 80% or above. Updated: 2019-05-17 12:32:09 By: Emily Eyre	

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			 The epidemiology faculty: will review the full distribution of exam scores
			 examine how this assignment fits into the overall grade for the course consider whether the rigor of the exam is appropriate for the course evaluate whether specific exam topics constitute a majority of lost points and evaluate associated teachin of these topics. consider whether pre- requisites are appropriately preparing students for success in this course
			Updated: 2019-06-12 10:42:30 By: Brianna Magnusson

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the HTLH 449 – Data-Based Homework Assignments Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = Less than 70% Updated: 2019-05-17 12:31:31 By: Emily Eyre	Fair 72% of students scored 80% or above. Updated: 2019-05-17 12:32:14 By: Emily Eyre	 The epidemiology faculty: will review the full distribution of assignment scores examine how this assignment fits into the overall grade for the course consider whether the rigor of the assessment is appropriate for the course identify if improvements can be made to instructions/rubrics for this assessment consider whether pre-requisites are appropriately preparing students for success in this course Updated: 2019-06-12 10:43:40 By: Brianna Magnusson

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the HLTH 493 – Capstone Project –	Excellent 100% of students scored 80% or above.	
	Original Data Analysis & Report	Updated: 2019-05-17 12:32:18 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = Less than 70%		
	Updated: 2019-05-17 12:31:37 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Aligned	Direct	Excellent	
Critical Assessment of Epidemiologic Literature	% of students who score 80% or above on the	100% of students scored 80% or above.	
Critique studies for their validity and contribution to the discipline.	HLTH 449- Study Critique Assignment	Updated: 2019-05-17 12:32:22 By: Emily Eyre	
Updated: 2019-05-13 13:46:04 By: Emily Eyre	Excellent = 90% - 100%		
Excellent	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = Less than 70%		
	Updated: 2019-05-17 12:31:45 By: Emily Eyre		
	Direct	Excellent	
	% of students who score 80% or above on the	100% of students scored 80% or above.	
	HLTH 493 – Systematic Literature Review	Updated: 2019-05-17 12:32:27 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = Less than 70%		
	Updated: 2019-05-17 12:31:50 By: Emily Eyre		

BYU Department of Public Health

Senior Survey Data – Epidemiology

Epidemiology Senior Survey Data

Senior Survey Data					Aca	der	nic Yea	ar			
			013- 2014	201	4+2015		015- 016		016- 2017		017- 018
		Ν	%	N	%	Ν	%	Ν	%	Ν	%
1. Which of the following best describes what you anticipate to be your	Employed full-time in a job related to your major field	9	64%	3	27%	5	36%	4	31%	4	27%
primary occupation during the first year after you complete your degree?	Employed full-time in a job not related to your major field	0	0%	2	18%	1	7%	3	23%	2	13%
(Choose one.)	Employed part-time	1	7%	0	0%	5	36%	1	8%	0	0%
	Homemaker/stay at home parent	0	0%	1	9%	1	7%	0	0%	2	13%
	Student (pursuing graduate or professional degree)	4	29%	5	45%	2	14%	5	38%	5	33%
	Other job (e.g. internship, self- employed)	0	0%	0	0%	0	0%	0	0%	0	0%
	Don't know	0	0%	0	0%	0	0%	0	0%	1	7%
	Other job (e.g. internship, self- employed)	0	0%	0	0%	0	0%	0	0%	1	7%
	Total	14	100%	11	100%	14	100%	13	100%	15	100%
15. How would you rate	Poor	0	0%	1	10%	0	0%	0	0%	0	0%
your overall educational experience at BYU?	Fair	1	7%	0	0%	1	7%	2	17%	0	0%
	Good	5	36%	3	30%	8	57%	4	33%	6	40%
	Excellent	8	57%	6	60%	5	36%	6	50%	9	60%
	Total	14	100%	10	100%	14	100%	12	100%	15	100%
44. Are you aware of the	Yes	7	54%	6	67%	5	38%	4	33%	7	47%
expected learning outcomes for your major?	No	6	46%	3	33%	8	62%	8	67%	8	53%
	Total	13	100%	9	100%	13	100%	12	100%	15	100%
45. To what extent do you	Strongly disagree	0	0%	0	0%	2	40%	0	0%	1	14%
agree or disagree with the	Disagree	0	0%	0	0%	0	0%	2	50%	0	0%

BYU Department of Public Health

Senior Survey Data – Epidemiology

following statement? 'My	No opinion	0	0%	0	0%	0	0%	0	0%	1	14%
academic experiences helped me to achieve the	Agree	7	100%	6	100%	2	40%	0	0%	5	71%
expected learning outcomes	Strongly agree	0	0%	0	0%	1	20%	2	50%	0	0%
for my major.'	Total	7	100%	6	100%	5	100%	4	100%	7	100%
51. If you were starting your	Definitely no	0	0%	0	0%	1	8%	2	17%	1	7%
college career over, would you choose to graduate with	Probably no	4	31%	4	44%	2	15%	2	17%	1	7%
the same major?	Uncertain	1	8%	0	0%	1	8%	2	17%	1	7%
	Probably yes	5	38%	3	33%	5	38%	3	25%	7	47%
	Definitely yes	3	23%	2	22%	4	31%	3	25%	5	33%
	Total	13	100%	9	100%	13	100%	12	100%	15	100%
57a. Work regularly with a	0	4	33%	3	33%	9	69%	4	33%	6	40%
faculty member outside of class("Mentored Student	1	0	0%	2	22%	2	15%	3	25%	1	7%
Learning", research, creative	2	4	33%	2	22%	1	8%	1	8%	1	7%
works, etc.)	3	4	33%	1	11%	1	8%	2	17%	2	13%
	4+	0	0%	1	11%	0	0%	2	17%	5	33%
	Total	12	100%	9	100%	13	100%	12	100%	15	100%
Notes:											

1. Senior Survey is administered three times during each academic year just prior to the December, April, and August graduations

2. Use caution in interpreting results based on a small N (particularly N < 15).

BYU Department of Public Health

Alumni Questionnaire Data – Epidemiology

Epidemiology Alumni Survey Data

Senior Survey Data			Coł	or	t Year (lminist Degree		d 3-yea	rs P	ost
		2	010		2011		2012	2	2013	2	2014
		N	%	N	%	N	%	Ν	%	Ν	%
Which of the following best describes your current primary	Employed Full-Time in My Major Field	0	0%	0	0%	1	20%	7	54%	5	38%
occupation?	Employed Full-Time Outside My Major Field	0	0%	0	0%	2	40%	2	15%	4	31%
	Employed Part-Time	0	0%	0	0%	0	0%	1	8%	1	8%
	Fill-Time Homemaker	0	0%	0	0%	1	20%	2	15%	2	15%
	Full-Time Student	0	0%	1	100%	1	20%	1	8%	1	8%
	Unemployed	0	0%	0	0%	0	0%	0	0%	0	0%
	Total	0	0%	1	100%	5	100%	13	100%	13	100%
How would you evaluate your	Poor	0	0%	0	0%	0	0%	0	0%	0	0%
entire educational experience at BYU	Fair	0	0%	0	0%	0	0%	1	8%	0	0%
	Good	0	0%	1	100%	2	50%	4	31%	6	46%
	Excellent	0	0%	0	0%	2	50%	8	62%	7	54%
	Total	0	0%	1	100%	4	100%	13	100%	13	100%
If starting over would you choose	Definitely No	0	0%	0	0%	2	40%	0	0%	1	8%
to graduate with the same major?	Probably No	0	0%	0	0%	2	40%	3	23%	3	23%
	Uncertain	0	0%	0	0%	1	20%	2	15%	0	0%
	Probably Yes	0	0%	1	100%	0	0%	3	23%	7	54%
	Definitely Yes	0	0%	0	0%	0	0%	5	38%	2	15%
	Total	0	0%	1	100%	5	100%	13	100%	13	100%
How effectively did your	Very Poorly	0	0%	0	0%	0	0%	0	0%	0	0%
educational experiences at BYU prepare you for your current job?	Poorly	0	0%	0	0%	0	0%	0	0%	0	0%
, ,	Fairly Well	0	0%	0	0%	2	67%	4	57%	1	25%
	Quite Well	0	0%	0	0%	1	33%	2	29%	3	75%
	Extremely Well	0	0%	0	0%	0	0%	1	14%	0	0%
	Total	0	0%	0	0%	3	100%	7	100%	4	100%

BYU Department of Public Health

Alumni Questionnaire Data – Epidemiology

Describe your activities or plans for further formal schooling.	Finished A Bachelor's, No More Schooling	0	0%	0	0%	2	40%	2	15%	6	46%
	Finished A Bachelor's, Plan on Grad School	0	0%	0	0%	1	20%	3	23%	2	15%
	Finished A Bachelor's, Enrolled in Grad School	0	0%	1	100%	1	20%	2	15%	1	8%
	Finished A Grad Degree, No More Planned	0	0%	0	0%	0	0%	5	38%	3	23%
	Finished A Grad Degree, Planning Another	0	0%	0	0%	1	20%	1	8%	1	8%
	Total	0	0%	1	100%	5	100%	13	100%	13	100%
How effectively did BYU prepare	Very Ineffectively	0	0%	0	0%	0	0%	1	13%	0	0%
you for graduate school?	Ineffectively	0	0%	0	0%	0	0%	0	0%	0	0%
	Effectively	0	0%	0	0%	2	100%	5	63%	2	40%
	Very Effectively	0	0%	1	100%	0	0%	2	25%	3	60%
	Total	0	0%	1	100%	2	100%	8	101%	5	100%
Notes:											
1. The Alumni Questionnaire is ad	ministered to graduating) co	bhort	s t	hree ye	ar	s follow	ving	their g	radu	uation
2. Use caution in interpreting resul	ts based on a small N (bar	ticula	arly	y N < 1	5).					

Public Health BS Environmental - Occupational Health

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Aligned Environmental/Occupational Hazards Assessment Assess the various biological, chemical, and physical hazards of the ambient, indoor, and work environment that can adversely affect human health. Updated: 2019-05-17 12:01:34 By: Emily Eyre Good	Direct % of students who score 80% or above on the HLTH 322 Final Exam Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% Updated: 2019-05-17 12:27:17 By: Emily Eyre	Good 89% of students scored 80% or above. Updated: 2019-05-17 12:28:41 By: Emily Eyre	Taken Provided a final exam study guide. Updated: 2019-06-13 19:42:23 By: Steve Thygerson Planned Will modify presentation slides to more closely align with final exam study guide. Updated: 2019-06-13 19:42:36 By: Steve Thygerson
	Direct % of students who score 80% or above on the HLTH 324 Control Strategies Project Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% Updated: 2019-05-17 12:27:37 By: Emily Eyre	Excellent 91% of students scored 80% or above. Updated: 2019-05-17 12:28:45 By: Emily Eyre	Taken Developed a more refined grading rubric for this control strategies project. Both the TA and professo grade the project. Updated: 2019-06-13 16:54:46 By: Steve Thygerson

Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Direct % of students who score 80% or above on the HLTH 426 Final Paper Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% Updated: 2019-05-17 12:27:43 By: Emily Eyre	Excellent 91% of students scored 80% or above. Updated: 2019-05-17 12:28:49 By: Emily Eyre	Planned Students will be provided with additional case studies and examples of the Threshold Limit Value documentation. Updated: 2019-06-13 19:45:12 By: Steve Thygerson
Direct % of students who score 80% or above on the HLTH 428 Final Exam Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% Updated: 2019-05-17 12:27:50	Good 81% of students scored 80% or above. Updated: 2019-05-17 12:28:55 By: Emily Eyre	Planned Some students are still struggling to understand some of the calculations used in the class. Students will be given additional homework assignments specific to these calculations to reinforce how and when to use equations learned in class. Updated: 2019-06-18 11:19:12 By: Jim Johnston
	<pre>(Direct and Indirect Evidence) (Direct % of students who score 80% or above on the HLTH 426 Final Paper Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% Updated: 2019-05-17 12:27:43 By: Emily Eyre Direct % of students who score 80% or above on the HLTH 428 Final Exam Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% </pre>	(Direct and Indirect Evidence)Direct% of students who score 80% or above on theHLTH 426 Final PaperHLTH 426 Final PaperExcellent = 90% - 100% Good = 80% - 89%Fair = 70% - 79%Poor - below 70%Updated: 2019-05-17 12:27:43 By: Emily EyreDirect% of students who score 80% or above on theHLTH 428 Final ExamHLTH 428 Final ExamExcellent = 90% - 100% Good = 80% - 89%Fair = 70% - 79%Poor - below 70%Updated: 2019-05-17 12:27:43 By: Emily EyreDirectSo of students who score 80% or above on theHLTH 428 Final ExamExcellent = 90% - 100% Good = 80% - 89%Fair = 70% - 79% Poor - below 70%Poor - below 70%

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the HLTH 429 Final Exam Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% Updated: 2019-05-17 12:27:55 By: Emily Eyre	Excellent 100% of students scored 80% or above. Updated: 2019-05-17 12:29:00 By: Emily Eyre	Planned One of the lab activities on indoor allergen exposures did not work. This lab activity will be changed for the coming academic year. Updated: 2019-06-18 11:16:31 By: Jim Johnston
Aligned Environmental/Occupational Health Interventions Anticipate, recognize, evaluate and control environmental and occupational hazards. Updated: 2019-05-17 10:56:57 By: Emily Eyre Excellent	Direct % of students who score 80% or above on the HLTH 322 Final Exam Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% Updated: 2019-05-17 12:28:01 By: Emily Eyre	Good 89% of students scored 80% or above. Updated: 2019-05-17 12:29:05 By: Emily Eyre	Planned Will modify presentation slides to more closely align with final exam study guide. Updated: 2019-06-13 19:43:01 By: Steve Thygerson Taken Provided a final exam study guide. Updated: 2019-06-13 19:43:22 By: Steve Thygerson

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Excellent	Planned
	% of students who score 80% or above on the	91% of students scored 80% or above.	Developed a more refined grading rubric for this control strategies
	HLTH 324 Control Strategies Project	Updated: 2019-05-17 12:29:09 By: Emily Eyre	project. Both the TA and professo grade the project.
	Excellent = 90% - 100%		Updated: 2019-06-13 19:45:55 By: Steve Thygerson
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor - below 70%		
	Updated: 2019-05-17 12:28:06 By: Emily Eyre		
	Direct	Excellent	Planned
	% of students who score 80% or above on the	91% of students scored 80% or above.	Students will be provided with additional case studies and
	HLTH 426 Final Paper	Updated: 2019-05-17 12:29:14 By: Emily Eyre	examples of the Threshold Limit Value documentation.
	Excellent = 90% - 100%		Updated: 2019-06-13 19:45:23
	Good = 80% - 89%		By: Steve Thygerson
	Fair = 70% - 79%		
	Poor - below 70%		
	Updated: 2019-05-17 12:28:11 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on the HLTH 428 Final Exam Excellent = $90\% - 100\%$ Good = $80\% - 89\%$ Fair = $70\% - 79\%$ Poor - below 70% Updated: 2019-05-17 12:28:18	Good 81% of students scored 80% or above. Updated: 2019-05-17 12:29:19 By: Emily Eyre	Planned Students will be given additional instruction and hands-on activities directed specifically at industrial ventilation as a control measure for occupational exposures. I am currently working with Clark Snelgrove in the physics department at BYU to develop laboratory learing activities related to this topic.
	By: Emily Eyre Direct % of students who score 80% or above on the HLTH 429 Final Exam Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% Updated: 2019-05-17 12:28:23 By: Emily Eyre	Excellent 100% of students scored 80% or above. Updated: 2019-05-17 12:29:24 By: Emily Eyre	By: Jim Johnston Planned I taught this course for the first time during winter semester 2019. The course focused heavily on assessment of hazards, but was not as strong on control measures as I would like. I am currently working on developing lab activities directed at controlling environmental exposures. Updated: 2019-06-18 11:27:35 By: Jim Johnston
Aligned Environmental/Occupational Moral Code and Ethics Apply moral and ethical principles as they apply to the science of Environmental/Occupational			

peory and practice. xpected Learning Outcomes pdated: 2019-05-17 14:14:49	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
<u>Excellent</u>	Direct % of students who address Management Commitment/Employee Involvement on the HLTH 324 Control Strategies Project Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% Updated: 2019-05-17 12:00:25	Excellent 100% of students addressed Management Commitment/Employee Involvement. Updated: 2019-05-13 13:39:04 By: Emily Eyre	Planned Include a second exam question to separate management commitment and employee involvement understanding. Updated: 2019-06-13 16:59:22 By: Steve Thygerson
	By: Emily Eyre Direct % of students who correctly respond to the ethics-based essay question on the HLTH 324 Final Exam	Excellent 100% of students correctly responded to the ethics-based essay question. Updated: 2019-05-13 13:39:36 By: Emily Eyre	Planned No action planned. Updated: 2019-06-13 16:59:36 By: Steve Thygerson
	Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor - below 70% Updated: 2019-05-17 12:00:50 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Good	0
	% of students who correctly	88% of students correctly	No action planned.
	identify ethical issues and appropriate responses to ethical issues presented in	identified ethical issues and appropriate responses to ethical issues presented.	Updated: 2019-06-18 11:27:51 By: Jim Johnston
	HLTH 428 Ethics Case Studies	Updated: 2019-05-17 12:30:31 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor - below 70%		
	Updated: 2019-05-17 12:30:40 By: Emily Eyre		

BYU Department of Public Health

Senior Survey Data – Environmental / Occupational Health

Senior Survey Data					Ac	ade	mic Ye	ar			
			013- 2014		014- 015		015- 016		016- 017		2017- 2018
		N	%	N	%	N	%	N	%	N	%
1. Which of the following best describes what you anticipate to be your primary occupation	Employed full-time in a job related to your major field	6	27%	12	71%	6	32%	10	71%	0	0%
during the first year after you complete your degree? (Choose one.)	Employed full-time in a job not related to your major field	2	9%	0	0%	3	16%	1	7%	0	0%
	Employed part-time	1	5%	1	6%	1	5%	0	0%	3	33%
	Homemaker/stay at home parent	2	9%	1	6%	1	5%	0	0%	2	22%
	Student (pursuing graduate or professional degree)	10	45%	3	18%	6	32%	3	21%	2	22%
	Other job (e.g. internship, self- employed)	1	5%	0	0%	0	0%	0	0%	0	0%
	Don't know	0	0%	0	0%	2	11%	0	0%	2	22%
	Other job (e.g. internship, self- employed)	0	0%	0	0%	0	0%	0	0%	0	0%
	Total	22	100%	17	101%	19	100%	14	100%	9	100%
15. How would you rate your	Poor	0	0%	1	6%	0	0%	0	0%	0	0%
overall educational experience at BYU?	Fair	2	10%	1	6%	1	5%	2	14%	0	0%
	Good	9	45%	9	53%	8	42%	4	29%	6	67%
	Excellent	9	45%	6	35%	10	53%	8	57%	3	33%
	Total	20	100%	17	100%	19	100%	14	100%	9	100%
44. Are you aware of the	Yes	11	58%	6	38%	7	39%	6	43%	4	50%
expected learning outcomes for your major?	No	8	42%	10	63%	11	61%	8	57%	4	50%
	Total	19	100%	16	100%	18	100%	14	100%	8	100%
45. To what extent do you	Strongly disagree	0	0%	0	0%	0	0%	0	0%	0	0%
agree or disagree with the	Disagree	1	9%	0	0%	0	0%	0	0%	0	0%

BYU Department of Public Health

Senior Survey Data – Environmental / Occupational Health

following statement? 'My	No opinion	0	0%	0	0%	1	14%	0	0%	0	0%
academic experiences helped me to achieve the expected	Agree	6	55%	4	67%	6	86%	3	50%	4	100%
learning outcomes for my	Strongly agree	4	36%	2	33%	0	0%	3	50%	0	0%
major.'	Total	11	100%	6	100%	7	100%	6	100%	4	100%
51. If you were starting your	Definitely no	3	16%	1	6%	2	11%	2	14%	0	0%
college career over, would you choose to graduate with the	Probably no	2	11%	5	31%	2	11%	2	14%	3	38%
same major?	Uncertain	5	26%	1	6%	5	28%	4	29%	0	0%
	Probably yes	5	26%	5	31%	7	39%	3	21%	3	38%
	Definitely yes	4	21%	4	25%	2	11%	3	21%	2	25%
	Total	19	100%	16	100%	18	100%	14	100%	8	100%
57a. Work regularly with a	0	5	26%	10	63%	9	50%	8	57%	4	50%
faculty member outside of class("Mentored Student	1	3	16%	2	13%	4	22%	3	21%	1	13%
Learning", research, creative	2	6	32%	2	13%	1	6%	1	7%	2	25%
works, etc.)	3	1	5%	0	0%	3	17%	0	0%	0	0%
	4+	4	21%	2	13%	1	6%	2	14%	1	13%
	Total	19	100%	16	100%	18	100%	14	100%	8	100%
Notes:											

1. Senior Survey is administered three times during each academic year just prior to the December, April, and August graduations

2. Use caution in interpreting results based on a small N (particularly N < 15).

BYU Department of Public Health

Alumni Questionnaire Data – Environmental/Occupational Health

Environmental / Occupation	onal Health Alum	ni	Sur	ve	y Dat	а					
Senior Survey Data			Col	hor	rt Year	-	ministe Degree		l 3-yea	rs P	ost
		2011		2012		2013		2014		2	2015
		Ν	%	N	%	Ν	%	Ν	%	Ν	%
Which of the following best describes your current primary occupation?	Employed Full-Time in My Major Field	0	0%	0	0%	2	15%	5	33%	4	31%
	Employed Full-Time Outside My Major Field	0	0%	0	0%	3	23%	6	40%	3	23%
	Employed Part-Time	0	0%	0	0%	2	15%	0	0%	1	8%
	Fill-Time Homemaker	0	0%	0	0%	4	31%	1	7%	2	15%
	Full-Time Student	0	0%	2	100%	1	8%	1	7%	0	0%
	Unemployed	0	0%	0	0%	1	8%	2	13%	3	23%
	Total	0	0%	2	100%	13	100%	15	100%	13	100%
How would you evaluate your	Poor	0	0%	0	0%	0	0%	1	7%	0	0%
entire educational experience at BYU	Fair	0	0%	0	0%	0	0%	2	13%	0	0%
	Good	0	0%	1	50%	6	50%	5	33%	6	46%
	Excellent	0	0%	1	50%	6	50%	7	47%	7	54%
	Total	0	0%	2	100%	12	100%	15	100%	13	100%
If starting over would you choose	Definitely No	0	0%	0	0%	3	25%	3	20%	2	15%
to graduate with the same major?	Probably No	0	0%	1	50%	6	50%	2	13%	4	31%
-)	Uncertain	0	0%	1	50%	0	0%	6	40%	1	8%
	Probably Yes	0	0%	0	0%	2	17%	4	27%	3	23%
	Definitely Yes	0	0%	0	0%	1	8%	0	0%	3	23%
	Total	0	0%	2	100%	12	100%	15	100%	13	100%
How effectively did your	Very Poorly	0	0%	0	0%	0	0%	1	11%	0	0%
educational experiences at BYU prepare you for your current job?	Poorly	0	0%	0	0%	0	0%	2	22%	0	0%
· · · · · · · · · · · · · · · · · · ·	Fairly Well	0	0%	0	0%	1	33%	2	22%	1	17%
	Quite Well	0	0%	0	0%	2	67%	3	33%	4	67%
	Extremely Well	0	0%	0	0%	0	0%	1	11%	1	17%
	Total	0	0%	0	0%	3	100%	9	100%	6	100%

BYU Department of Public Health

Alumni Questionnaire Data – Environmental/Occupational Health

Describe your activities or plans for further formal schooling.	Finished A Bachelor's, No More Schooling	0	0%	0	0%	4	31%	5	33%	2	15%
	Finished A Bachelor's, Plan on Grad School	0	0%	0	0%	3	23%	8	53%	6	46%
	Finished A Bachelor's, Enrolled in Grad School	0	0%	2	100%	2	15%	1	7%	1	8%
	Finished A Grad Degree, No More Planned	0	0%	0	0%	3	23%	1	7%	4	31%
	Finished A Grad Degree, Planning Another	0	0%	0	0%	1	8%	0	0%	0	0%
	Total	0	0%	2	100%	13	100%	15	100%	13	100%
How effectively did BYU prepare	Very Ineffectively	0	0%	0	0%	0	0%	0	0%	0	0%
you for graduate school?	Ineffectively	0	0%	0	0%	0	0%	0	0%	0	0%
	Effectively	0	0%	1	50%	3	50%	1	50%	1	20%
	Very Effectively	0	0%	1	50%	3	50%	1	50%	4	80%
	Total	0	0%	2	100%	6	100%	2	100%	5	100%
Notes:											
1. The Alumni Questionnaire is ad	ministered to graduating	дc	ohor	ts f	three ye	ears	s follow	ing	their g	radı	uation
2. Use caution in interpreting resu	lts based on a small N (pa	rticul	arl	y N < 1	5).					

Public Health BS Health Science

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Aligned Cultural Competency Explain the role of cultural competency and design of culturally-appropriate communication (e.g. motivational interviewing), care, and policies in addressing health disparities in diverse populations and settings. Updated: 2019-05-14 15:37:44 By: Emily Eyre Excellent	Direct % of students who receive a passing grade or better on HLTH 425 - Final Project Excellent = 90% - 100% Good = 75% - 89% Fair = 65% - 74% Poor = below 65% Updated: 2019-05-17 12:11:55 By: Emily Eyre	Excellent 100% of students received a passing grade or better. Updated: 2019-05-14 15:36:43 By: Emily Eyre	Taken During 2017-2018 we planned many improvements to the Health Science major, as part of a departement-wide overhaul of curriculum affecting all undergraduate programs our department offers. During Fall 2018-Winter 2019 we implemented the planned improvements. These apply broadly to all the program-level learning outcomes, so I am listing them only once, here, though they apply comprehensively to everything in this table. • Develop new emphasis- specific learning outcomes. We did this in Aug 2018 and Emily Eyre entered them into learningoutcomes.byu.edu by Dec 2018. • Use a new set of HS emphasis-specific courses: HLTH 423 (new course), 425 (new course), 440 (existing course but newly required in HS), 447

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			(existing course), and 496F (existing course). We started this in Fall 2018.
			• Start using assessments from the new set of HS courses to measure HS program learning outcomes. We started this in Fall 2018. You can see these now listed in the Assessments column of th table.
			 Redefine types and scope of HTH 496R internships for HS based on the new HS program learning outcomes. We did this in Feb/Mar 2019 and all the updates have been incorporated into the latest internship manual by Stephanie Lutz (see ph.byu.edu/Undergrad- Internships/Internships-
			Manual). We now ask HS students to tell us when they propose an internship how they think their internship will align with th current HS program
			learning outcomes. We require alignment with at least 1 of the 5 outcomes. We have also implemente HS faculty review of the fir
			stage of internship approval, which is the

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			internship site pre-approv (Form A in the internship approval process). This way, HS faculty are now reviewing internship alignment with HS progra learning outcomes, rather than Stephanie Lutz havin to do that. To date (4/8/2019) we have reviewed over 10 new internship site pre- approvals under this new
			 system. Provide examples of various types of internship that align with current HS program learning outcomes. We did this in Feb/Mar 2019 by includin a lengthy list of examples the internship manual. All HS faculty contributed examples.
			 Gather and track experiences and feedback from HS students and faculty regarding the new curriculum. We have started doing this, but new to continue and probably need to be more systematic.
			Updated: 2019-04-08 15:22:40 By: Emily Eyre

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			Planned During Winter 2019 we have been discussing and planning some additional improvements to the Health Science major, to continue building on the progress we've made up to this point (described above in Actions Taken).
			We are currently preparing a proposal to adapt the HS program as follows:
			 Stop using HLTH 496R internship as the culminating experience, and instead make HLTH 496R internship an elective experience, with fewer prerequisites. This change will make internships more appealing to students earlier in their HS program and allow internships to potentially be at more of all exploratory level rather that a culminating level.
			 Start using HLTH 423 as the culminating experience making it a capstone course with more prerequisites than it currently has. This change
			will lead to students comir into HLTH 423 better prepared and closer to the end of their HS program,

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			and allow HLTH 423 to serve better as a bridge between college and future activities for the students.
			Our intention is to implement the switch to HLTH 496R becoming elective and HLTH 423 becoming approval from college and university curriculum committees. The issue we are addressing wit this change is that a majority of HS students go on to graduate school, medical school, or other advanced training immediately or of college, rather than going into the workforce. So, a required internship as a culminating experience was not meeting the needs of many students. We anticipate that HLTH 423, which focuses on integration of public health with primary care, will better meet students' needs as a capstone course / culminating experience. And retaining the HLTH 496R internship as an option will still preserve flexibility for HS students who desire an internship as part of their training.
			Another issue is that we have on offered HLTH 425 as a Fall semester class, which limits students' flexibility in completing all required HS courses. We plan
			to implement HLTH 425 as a Winter class in Winter 2020, and

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
			have it officially listed as Fall & Winter in the BYU course catalog beginning in Fall 2020.
			Updated: 2019-04-08 15:24:48 By: Emily Eyre
	Direct	Excellent	
	% of students who receive a passing grade or better on	99% of student received a passing grade or better.	
	HLTH 496R Internship Final Report	Updated: 2019-05-13 14:10:52 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 75% - 89%		
	Fair = 65% - 74%		
	Poor = below 65%		
	Updated: 2019-05-17 12:12:12 By: Emily Eyre		
Aligned			
Vulnerable and Marginalized Populations			
Summarize the major health issues, barriers, and challenges affecting health equity, health status, and health practices in vulnerable and marginalized populations.			
Updated: 2019-05-14 15:37:37 By: Emily Eyre			

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Excellent	
	% of students who receive a	100% of student received a	
	passing grade or better on	passing grade or better.	
	HLTH 425 - Final Project	Updated: 2019-05-13 14:12:01 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 75% - 89%		
	Fair = 65% - 74%		
	Poor = below 65%		
	Updated: 2019-05-17 12:12:23 By: Emily Eyre		
	Direct	Excellent	
	% of students who receive a passing grade or better on	100% of student received a passing grade or better.	
	HLTh 423 - Final Paper	Updated: 2019-05-13 14:12:54 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 75% - 89%		
	Fair = 65% - 74%		
	Poor = below 65%		
	Updated: 2019-05-17 12:33:30 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Actions Taken or Planned	
	Direct	Excellent	
	% of students who receive a passing grade or better on	99% of students received a passing grade or better.	
	HLTH 496R Internship Final Report	Updated: 2019-05-13 14:13:53 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 75% - 89%		
	Fair = 65% - 74%		
	Poor = below 65%		
	Updated: 2019-05-17 12:12:42 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned				
Aligned	Direct	Excellent					
Upstream Approach to Health	% of students who receive a	100% of students received a					
Analyze an upstream team	passing grade or better on	passing grade or better.					
approach to health by critiquing points at which integration between public health and primary	HLTH 423 - Final Paper	Updated: 2019-05-13 14:14:35 By: Emily Eyre					
care can occur including	Excellent = 90% - 100%						
opportunities for interdisciplinary	Good = 75% - 89%						
collaboration across sectors to improve population health.	Fair = 65% - 74%						
	Poor = below 65%						
Excellent D	Updated: 2019-05-17 12:12:52 By: Emily Eyre						
	Direct	Excellent					
	% of students who receive a passing grade or better on	99% of students received a passing grade or better.					
	HLTH 496R - Internship Final Report	Updated: 2019-05-13 14:16:11 By: Emily Eyre					
	Excellent = 90% - 100%						
	Good = 75% - 89%						
	Fair = 65% - 74%						
	Poor = below 65%						
	Updated: 2019-05-17 12:13:00 By: Emily Eyre						
Aligned Social Determinants of Health							
Create a conceptual framework on how to align and integrate							

public health and primary care to

address the social determinants of Expected Learning Outcomes health inequities in the access, quality, and delivery of care.	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Updated: 2019-05-14 15:37:27 By: Emily Eyre Excellent	Direct % of students who receive a passing grade or better on HLTH 423 - Conceptual Framework Excellent = 90% - 100% Good = 75% - 89% Fair = 65% - 74% Poor = below 65% Updated: 2019-05-17 12:13:13	Excellent 100% of students received a passing grade or better. Updated: 2019-05-13 14:16:53 By: Emily Eyre	
	By: Emily Eyre Direct % of students who receive a passing grade or better on HTLH 423 - Final Paper	Excellent 100% of students received a passing grade or better. Updated: 2019-05-13 14:17:32 By: Emily Eyre	
	Excellent = 90% - 100% Good = 75% - 89% Fair = 65% - 74% Poor = below 65% Updated: 2019-05-17 12:13:24 By: Emily Eyre		

)19	,	Expected Learning Outcomes							
	Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned					
		Direct % of students who receive a passing grade or better on HLTH 496R - Internship Final Report Excellent = 90% - 100% Good = 75% - 89% Fair = 65% - 74% Poor = below 65% Updated: 2019-05-17 12:13:33 By: Emily Eyre	Excellent 99% of students received a passing grade or better. Updated: 2019-05-13 14:18:13 By: Emily Eyre						
	Aligned Statistical Methods and Software Use statistical methods and statistical software to manage and analyze health-related data arising from epidemiologic or clinical samples in order to make inferences regarding the health of populations in public health and/or primary care settings. Updated: 2019-05-14 15:37:22 By: Emily Eyre Excellent	Direct % of students who receive a passing grade or better on HLTH 440 - Final Exam Excellent = 90% - 100% Good = 75% - 89% Fair = 65% - 74% Poor = below 65% Updated: 2019-05-17 12:13:45 By: Emily Eyre	Excellent 100% of students received a passing grade or better. Updated: 2019-05-13 14:19:28 By: Emily Eyre						

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Good	
	% of students who receive a passing grade or better on	81% of students received a passing grade or better.	
	HLTH 447 - Final Exam	Updated: 2019-05-17 11:32:48 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 75% - 89%		
	Fair = 65% - 74%		
	Poor = below 65%		
	Updated: 2019-05-17 12:13:54 By: Emily Eyre		
	Direct	Excellent	
	% of students who receive a passing grade or better on	99% of students received a passing grade or better.	
	HLTH 496R - Internship Final Report	Updated: 2019-05-13 14:21:20 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 75% - 89%		
	Fair = 65% - 74%		
	Poor = below 65%		
	Updated: 2019-05-17 12:14:09 By: Emily Eyre		

BYU Department of Public Health

Senior Survey Data – Health Science

Health Science Senior Survey Data

Senior Survey Data					Ac	ade	emic Ye	ear			
			013- 2014		014- 2015		015- 016		016- 2017		017- 018
		N	%	N	%	Ν	%	N	%	Ν	%
1. Which of the following best describes what you anticipate to be your primary occupation	Employed full-time in a job related to your major field	4	14%	1	5%	4	15%	2	7%	6	35%
during the first year after you complete your degree? (Choose one.)	Employed full-time in a job not related to your major field	1	3%	2	9%	5	19%	6	20%	2	12%
	Employed part-time	2	7%	3	14%	1	4%	1	3%	2	12%
	Homemaker/stay at home parent	0	0%	0	0%	0	0%	0	0%	0	0%
	Student (pursuing graduate or professional degree)	22	76%	16	73%	15	58%	20	67%	6	35%
	Other job (e.g. internship, self- employed)	0	0%	0	0%	1	4%	0	0%	0	0%
	Don't know	0	0%	0	0%	0	0%	1	3%	1	6%
	Other job (e.g. internship, self- employed)	0	0%	0	0%	0	0%	0	0%	0	0%
	Total	29	100%	22	100%	26	100%	30	100%	17	100%
15. How would you rate your	Poor	1	4%	0	0%	1	4%	1	3%	0	0%
overall educational experience at BYU?	Fair	2	7%	1	5%	3	12%	4	14%	3	18%
	Good	7	25%	9	43%	10	38%	14	48%	7	41%
	Excellent	18	64%	11	52%	12	46%	10	34%	7	41%
	Total	28	100%	21	100%	26	100%	29	100%	17	100%
44. Are you aware of the	Yes	11	39%	10	48%	11	42%	15	52%	10	67%
expected learning outcomes for your major?	No	17	61%	11	52%	15	58%	14	48%	5	33%
- ,	Total	28	100%	21	100%	26	100%	29	100%	15	100%
45. To what extent do you	Strongly disagree	0	0%	1	10%	1	9%	0	0%	0	0%
agree or disagree with the	Disagree	0	0%	1	10%	1	9%	0	0%	0	0%

BYU Department of Public Health

Senior Survey Data – Health Science

following statement? 'My academic experiences helped me to achieve the expected	No opinion	2	18%	0	0%	0	0%	3	20%	0	0%
	Agree	6	55%	3	30%	6	55%	7	47%	10	100%
learning outcomes for my	Strongly agree	3	27%	5	50%	3	27%	5	33%	0	0%
major.'	Total	11	100%	10	100%	11	100%	15	100%	10	100%
51. If you were starting your	Definitely no	1	4%	0	0%	4	15%	6	21%	1	7%
college career over, would you choose to graduate with	Probably no	4	14%	3	14%	7	27%	4	14%	0	0%
the same major?	Uncertain	5	18%	6	29%	3	12%	4	14%	7	47%
	Probably yes	12	43%	7	33%	6	23%	8	28%	5	33%
	Definitely yes	6	21%	5	24%	6	23%	7	24%	2	13%
	Total	28	100%	21	100%	26	100%	29	100%	15	100%
57a. Work regularly with a	0	5	19%	8	38%	12	46%	12	41%	5	36%
faculty member outside of class("Mentored Student	1	4	15%	2	10%	3	12%	4	14%	3	21%
Learning", research, creative	2	5	19%	1	5%	2	8%	5	17%	3	21%
works, etc.)	3	4	15%	4	19%	1	4%	4	14%	0	0%
	4+	8	31%	6	29%	8	31%	4	14%	3	21%
	Total	26	100%	21	100%	26	101%	29	100%	14	100%
Notes:											

1. Senior Survey is administered three times during each academic year just prior to the December, April, and August graduations

2. Use caution in interpreting results based on a small N (particularly N < 15).

BYU Department of Public Health

Alumni Questionnaire Data – Health Science

Health Science Alumni Survey Data

Senior Survey Data		Cohort Year (Administered 3-years Post Degree)						ost			
		2011 2012		2012	2	013	2	2014	2	2015	
		Ν	%	N	%	Ν	%	Ν	%	Ν	%
Which of the following best describes your current primary	Employed Full-Time in My Major Field	0	0%	1	20%	2	13%	4	22%	3	16%
occupation?	Employed Full-Time Outside My Major Field	0	0%	2	40%	2	13%	2	11%	4	21%
	Employed Part-Time	0	0%	0	0%	2	13%	1	6%	1	5%
	Fill-Time Homemaker	0	0%	0	0%	0	0%	0	0%	1	5%
	Full-Time Student	0	0%	2	40%	10	63%	11	61%	9	47%
	Unemployed	0	0%	0	0%	0	0%	0	0%	1	5%
	Total	0	0%	5	100%	16	100%	18	100%	19	100%
How would you evaluate your entire educational experience at BYU	Poor	0	0%	1	20%	1	7%	0	0%	1	5%
	Fair	0	0%	0	0%	3	20%	2	11%	0	0%
	Good	0	0%	2	40%	7	47%	4	22%	5	26%
	Excellent	0	0%	2	40%	4	27%	12	67%	13	68%
	Total	0	0%	5	100%	15	100%	18	100%	19	100%
If starting over would you choose	Definitely No	0	0%	0	0%	2	13%	3	17%	3	16%
to graduate with the same major?	Probably No	0	0%	2	40%	4	27%	2	11%	3	16%
·	Uncertain	0	0%	0	0%	2	13%	1	6%	4	21%
	Probably Yes	0	0%	3	60%	6	40%	11	61%	5	26%
	Definitely Yes	0	0%	0	0%	1	7%	1	6%	4	21%
	Total	0	0%	5	100%	15	100%	18	100%	19	100%
How effectively did your	Very Poorly	0	0%	0	0%	0	0%	0	0%	0	0%
educational experiences at BYU prepare you for your current job?	Poorly	0	0%	0	0%	1	25%	1	50%	0	0%
, , , , , , , , , , , , , , , , , , ,	Fairly Well	0	0%	1	100%	1	25%	1	50%	1	33%
	Quite Well	0	0%	0	0%	0	0%	0	0%	2	67%
	Extremely Well	0	0%	0	0%	2	50%	0	0%	0	0%
	Total	0	0%	1	100%	4	100%	2	100%	3	100%

BYU Department of Public Health

Alumni Questionnaire Data – Health Science

Describe your activities or plans for further formal schooling.	Finished A Bachelor's, No More Schooling	0	0%	1	20%	1	6%	2	11%	3	16%
	Finished A Bachelor's, Plan on Grad School	0	0%	1	20%	4	25%	1	6%	1	5%
	Finished A Bachelor's, Enrolled in Grad School	0	0%	2	40%	10	63%	10	56%	10	53%
	Finished A Grad Degree, No More Planned	0	0%	1	20%	0	0%	4	22%	3	16%
	Finished A Grad Degree, Planning Another	0	0%	0	0%	1	6%	1	6%	2	11%
	Total	0	0%	5	100%	16	100%	18	100%	19	100%
How effectively did BYU prepare	Very Ineffectively	0	0%	0	0%	1	9%	0	0%	0	0%
you for graduate school?	Ineffectively	0	0%	1	33%	1	9%	2	13%	1	7%
	Effectively	0	0%	2	67%	5	45%	9	60%	5	33%
	Very Effectively	0	0%	0	0%	4	36%	4	27%	9	60%
	Total	0	0%	3	100%	11	100%	15	100%	15	100%
Notes:											
1. The Alumni Questionnaire is ad	ministered to graduating	дc	ohor	ts t	three ye	ears	s follow	ing	their g	radı	uation
2. Use caution in interpreting resu	lts based on a small N (pa	rticul	arl	y N < 1	5).					

Public Health MPH

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Aligned Community Monitoring Use surveillance and assessment methods to understand, diagnose and address public health issues and health hazards. Updated: 2019-05-17 11:50:26 By: Emily Eyre Good	Direct % of students who score 80% or above on HTLH 612 Final Program Plan Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 11:40:39	Excellent 100% of students scored 80% or above. Updated: 2019-05-13 14:22:56 By: Emily Eyre	Taken Recent changes have all been implemented and measured and are in accordance with CEPH accredidation criteria. No additional action needed at this time. Updated: 2019-06-14 13:38:30 By: Benjamin Crookston
	By: Emily Eyre Direct % of students who score 80% or above on HTLH 612 Consultation #1 Excellent = 90% - 100%	Good 80% of students scored 80% or above. Updated: 2019-05-17 11:47:21 By: Emily Eyre	
	Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 11:40:45 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	DirectAverage score of all students on CPH Exam - Evidence-BasedApproaches to Public Healthsection Excellent = average score greaterthan 15Good = average score 13-14Fair = average score 11-12Poor = average score less than 11Updated: 2019-05-17 11:44:24By: Emily Eyre	Good Average score of all students was 13. Updated: 2019-05-17 11:47:30 By: Emily Eyre	
	Direct Average score of all students on CPH Exam - Public Health Biology and Human Disease Risk section	Good Average score of all students was 13. Updated: 2019-05-17 11:47:37 By: Emily Eyre	
	Excellent = average score greater than 15 Good = average score 13-14 Fair = average score 11-12 Poor = average score less than 11 Updated: 2019-05-17 14:33:05 By: Emily Eyre		
Aligned Research/Evaluation			

Jse appropriate qualitative and Expected Learning Outcomes Juantitative research methods to conduct public health research	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned			
Ind evaluation.	Direct	Fair	Taken			
y: Emily Eyre	% of students who score 80% or above on	70% of students scored 80% or above.	Recent changes have all been implemented and measured an are in accordance with CEPH			
Good	HTLH 602 Take Home Exams	Updated: 2019-05-17 11:47:43 By: Emily Eyre	accredidation criteria. No additional action needed at this			
	Excellent = 90% - 100%		time.			
	Good = 80% - 89%		Updated: 2019-06-14 13:39:18			
	Fair = 70% - 79%		By: Benjamin Crookston			
	Poor = below 70%					
	Updated: 2019-05-17 11:40:56 By: Emily Eyre					
	Direct	Poor				
	% of students who score 80% or above on	44% of students scored 80% or above.				
	HLTH 604 Final Exam	Updated: 2019-05-13 14:24:06 By: Emily Eyre				
	Excellent = 90% - 100%					
	Good = 80% - 89%					
	Fair = 70% - 79%					
	Poor = below 70%					
	Updated: 2019-05-17 11:41:04 By: Emily Eyre					

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Excellent	
	% of students who score 80% or	100% of students scored 80% or	
	above on	above.	
	HLTH 612 Final Program Plan	Updated: 2019-05-13 14:24:40 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = below 70%		
	Updated: 2019-05-17 11:41:11 By: Emily Eyre		
	Direct	Excellent	
	% of students who score 80% or above on	100% of students scored 80% or above.	
	HLTH 618 Research Concept Paper	Updated: 2019-05-13 14:25:11 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = below 70%		
	Updated: 2019-05-17 11:41:16 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Excellent	
	% of students who score 80% or	100% of students scored 80% or	
	above on	above.	
	HLTH 690 Semester Project	Updated: 2019-05-13 14:25:44 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = below 70%		
	Updated: 2019-05-17 11:41:22 By: Emily Eyre		
	Direct	Excellent	
	% of students who score 80% or above on	90% of students scored 80% or above.	
	HTLH 612 Consultation #3	Updated: 2019-05-13 14:26:02 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = below 70%		
	Updated: 2019-05-17 11:44:53 By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on HLTH 618 Ignite Presentations Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 11:41:37 By: Emily Eyre	Fair 70% of students scored 80% or above. Updated: 2019-05-17 11:47:57 By: Emily Eyre	
	Direct Average score of all students on CPH Exam - Public Health Biology and Human Disease Risk section Excellent = average score greater than 15 Good = average score 13-14 Fair = average score 11-12 Poor = average score less than 11 Updated: 2019-05-17 11:44:12	Good Average score of all students was 13 Updated: 2019-05-17 11:48:03 By: Emily Eyre	
	By: Emily Eyre		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Good	
	Average score of all students on	Average score of all students was	
	CPH Exam - Program Planning	14.	
	and Evaluation section	Updated: 2019-05-17 11:48:09 By: Emily Eyre	
	Excellent = average score greater than 15		
	Good = average score 13-14		
	Fair = average score 11-12		
	Poor = average score less than 11		
	Updated: 2019-05-17 11:45:08 By: Emily Eyre		
Aligned	Direct	Excellent	Taken
Educational Communication Methods and Strategies	% of students who score 80% or above on	100% of students scored 80% or above.	Recent changes have all been implemented and measured and
Create an effective communication intervention for public health practice which includes activities that inform,	HLTH 625 Health Impact Assessment Final Report	Updated: 2019-05-13 14:26:55 By: Emily Eyre	are in accordance with CEPH accredidation criteria. No additional action needed at this time.
educate and empower targeted	Excellent = 90% - 100%		
audiences.	Good = 80% - 89%		Updated: 2019-06-14 13:39:41 By: Benjamin Crookston
Updated: 2019-05-17 11:51:47	Fair = 70% - 79%		
By: Emily Eyre	Poor = below 70%		

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct % of students who score 80% or above on HLTH 630 Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 11:41:51 By: Emily Eyre	 This learning outcome will not be assessed in HLTH 630 until Fall 2019. Updated: 2019-05-16 14:43:13 By: Emily Eyre 	
	Direct Average score of all students on CPH Exam - Communication section	Good Average score of all students was 13. Updated: 2019-05-17 11:48:16 By: Emily Eyre	
	Excellent = average score greater than 15 Good = average score 13-14 Fair = average score 11-12 Poor = average score less than 11 Updated: 2019-05-17 11:45:32 By: Emily Eyre		
Aligned Cultural Sensitivity and Diversity Identify how diverse cultural values, traditions, geopolitical systems, and other social			

who score 80% or Dup Presentation % - 100% 89% 9% 70%	Excellent 100% of students scored 80% or above. Updated: 2019-05-13 14:27:16 By: Emily Eyre	Taken Recent changes have all been implemented and measured and are in accordance with CEPH accredidation criteria. No additional action needed at this time. Updated: 2019-06-14 13:39:53 By: Benjamin Crookston
-17 11:42:02		
who score 80% or alth Impact Final Report	Excellent 100% of students scored 80% or above. Updated: 2019-05-13 14:27:32 By: Emily Eyre	
% - 100% 89% 9% 70% -17 11:42:08		
	alth Impact Final Report % - 100% 89% 9% 70%	who score 80% or100% of students scored 80% or above.alth Impact Final ReportUpdated: 2019-05-13 14:27:32 By: Emily Eyre% - 100%89%9%70%

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct	Excellent	
	% of students who score 80% or above on	100% of students scored 80% or above.	
	HTLH 630 - Presentation and Self-Reflection on a Book	Updated: 2019-05-17 11:52:13 By: Emily Eyre	
	Excellent = 90% - 100%		
	Good = 80% - 89%		
	Fair = 70% - 79%		
	Poor = below 70%		
	Updated: 2019-05-17 11:42:15 By: Emily Eyre		
	Direct	Good	
	Average score of all students on	Average score of all students was	
	CPH Exam - Health Equity and	14.	
	Social Justice section	Updated: 2019-05-17 11:48:24 By: Emily Eyre	
	Excellent = average score greater than 15		
	Good = average score 13-14		
	Fair = average score 11-12		
	Poor = average score less than 11		
	Updated: 2019-05-17 11:45:53 By: Emily Eyre		
Aligned Leadership and Management			

Create a plan to mobilize Expected Learning Outcomes community partnerships to administer public health programs	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned					
and address health issues.	I							
	Direct	Excellent	0					
Jpdated: 2019-05-17 11:52:58 3y: Emily Eyre	% of students who score 80% or above on	100% of students scored 80% or above.	HLTH 607: Add additional assessment activities associate					
Good	HTLH 607 Final Business Plan	Updated: 2019-05-13 14:27:53 By: Emily Eyre	with systems thinking. As per, CEPH compliance reporting.					
	Excellent = 90% - 100%		Updated: 2019-06-14 10:06:59					
	Good = 80% - 89%		By: Carl Hanson					
	Fair = 70% - 79%							
	Poor = below 70%							
	Updated: 2019-05-17 11:42:23 By: Emily Eyre							
	Direct	Excellent						
	% of students who score 80% or above on	100% of students score 80% or above.						
	HTLH 630 - Grant Application	Updated: 2019-05-17 11:48:59 By: Emily Eyre						
	Excellent = 90% - 100%							
	Good = 80% - 89%							
	Fair = 70% - 79%							
	Poor = below 70%							
	Updated: 2019-05-17 11:42:29 By: Emily Eyre							

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct Average score of all students on CPH Exam - Leadership section Excellent = average score greater than 15 Good = average score 13-14 Fair = average score 11-12 Poor = average score less than 11 Updated: 2019-05-17 11:46:05	Good Average score of all students was 13. Updated: 2019-05-17 11:49:06 By: Emily Eyre	
	By: Emily EyreDirectAverage score of all students onCPH Exam - Collaboration and Partnership sectionExcellent = average score greater than 15Good = average score 13-14 Fair = average score 11-12	Good Average score of all students was 13. Updated: 2019-05-17 11:49:11 By: Emily Eyre	
	Poor = average score less than 11 Updated: 2019-05-17 11:46:13 By: Emily Eyre		

Aligned

Policy and Advocacy

Select and utilize appropriate advocacy skills in behalf of realworld, evidence-based policy

solutions to contemporary health Expected Learning Outcomes Issues.	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Jpdated: 2019-05-15 12:09:35			
By: Emily Eyre	Direct	Excellent	Taken
Good	% of students who score 80% or above on	100% of students scored 80% or above.	Recent changes have all been implemented and measured and
	HLTH 625 Health Impact Assessment Final Report	Updated: 2019-05-13 14:28:12 By: Emily Eyre	are in accordance with CEPH accredidation criteria. No additional action needed at this time.
	Excellent = 90% - 100%		
	Good = 80% - 89%		Updated: 2019-06-14 13:40:11 By: Benjamin Crookston
	Fair = 70% - 79%		· · · · · · · · · · · · · · · · · · ·
	Poor = below 70%		
	Updated: 2019-05-17 11:42:37 By: Emily Eyre		
	Direct	Fair	
	Average score of all students on	Average score of all students was	
	CPH Exam - Law and Ethics	12.	
	section	Updated: 2019-05-17 11:49:21 By: Emily Eyre	
	Excellent = average score greater than 15		
	Good = average score 13-14		
	Fair = average score 11-12		
	Poor = average score less than 11		
	Updated: 2019-05-17 11:46:29 By: Emily Eyre		

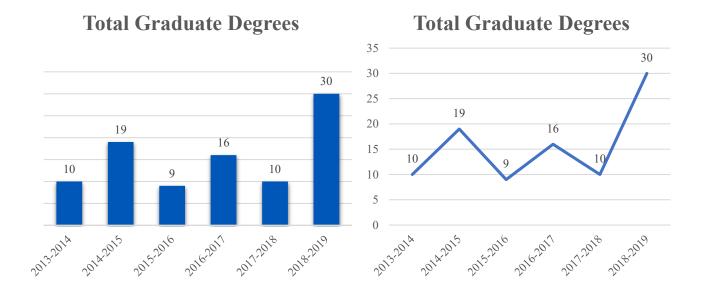
	Елре	ected Learning Outcomes	
Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	Direct Average score of all students on CPH Exam - Policy in Public Health section Excellent = average score greater than 15 Good = average score 13-14 Fair = average score 11-12 Poor = average score less than 11 Updated: 2019-05-17 11:46:39 By: Emily Eyre	Fair Average score of all students was 12. Updated: 2019-05-17 11:49:27 By: Emily Eyre	
Aligned Program Planning Management Develop a public health program plan that integrates principles for planning, implementation, and evaluation. Updated: 2019-05-17 11:53:31 By: Emily Eyre Good	Direct % of students who score 80% or above on HLTH 612 Final Program Plan Excellent = 90% - 100% Good = 80% - 89% Fair = 70% - 79% Poor = below 70% Updated: 2019-05-17 11:42:50 By: Emily Eyre	Excellent 100% of students scored 80% or above. Updated: 2019-05-13 14:28:39 By: Emily Eyre	Taken Recent changes have all been implemented and measured and are in accordance with CEPH accredidation criteria. No additional action needed at this time. Updated: 2019-06-14 13:40:32 By: Benjamin Crookston

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
	DirectAverage score of all students on CPH Exam - Program Planning and Evalution sectionExcellent = average score greater than 15Good = average score 13-14Fair = average score 11-12Poor = average score less than 11Updated: 2019-05-17 11:46:48 By: Emily Eyre	Good Average score of all students was 14. Updated: 2019-05-17 11:49:34 By: Emily Eyre	
	Direct Average score of all on CPH Exam - Program Management section Excellent = average score greater than 15 Good = average score 13-14 Fair = average score 11-12 Poor = average score less than 11 Updated: 2019-05-17 11:47:00 By: Emily Eyre	Good Average score of all students was 14. Updated: 2019-05-17 11:49:40 By: Emily Eyre	

Expected Learning Outcomes	Assessments (Direct and Indirect Evidence)	Conclusions Based on Evidence	Actions Taken or Planned
Aligned	Direct	Excellent	Taken
Social and Behavioral Theory	% of students who score 80% or	100% of students scored 80% or	Recent changes have all been
Apply social and behavioral theory to public health issues. Updated: 2019-05-17 11:53:38	above on HTLH 608 Theory Integration Project	above. Updated: 2019-05-13 14:29:02 By: Emily Eyre	implemented and measured and are in accordance with CEPH accredidation criteria. No additional action needed at this
By: Emily Eyre			time.
Good	Excellent = 90% - 100% Good = 80% - 89%		Updated: 2019-06-14 13:40:22 By: Benjamin Crookston
	Fair = 70% - 79%		
	Poor = below 70%		
	Updated: 2019-05-17 11:42:59 By: Emily Eyre		
	Direct	Good	
	Average score of all students on	Average score of all students was	
	CPH Exam - Health Equity and Social Justice section	14. Updated: 2019-05-17 11:49:47 By: Emily Eyre	
	Excellent = average score greater than 15		
	Good = average score 13-14		
	Fair = average score 11-12		
	Poor = average score less than 11		
	Updated: 2019-05-17 14:39:32 By: Emily Eyre		

BYU Department of Public Health

Graduate Degrees Awarded



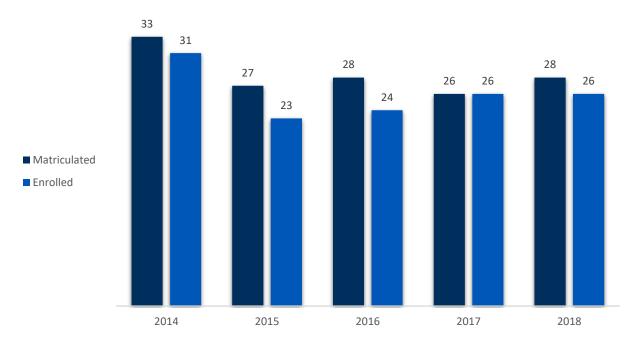
Graduate	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
MPH – Public Health	10	19	9	16	10	30
Total	10	19	9	16	10	30

Notes:

- 1. Data is collected one time annually a month or so after August graduation and is final for the academic year.
- 2. Students receiving multiple degrees will have their degrees counted in each discipline in which they were awarded
- 3. Data was pulled on 6/8/2019 by the SAAS report system at BYU

BYU Department of Public Health

Enrolled and Matriculated Graduate Students



Fall Semester

	2014		2015		2016		20)17	2018		
	Matr	Enroll	Enroll Matr Er		Matr	Matr Enroll		Enroll	Matr	Enroll	
Mast-Public Health	33	31	27 23 26 26 28		24	28	26				
Total Graduate Students	33	31	27	23	26	26	28	24	28	26	

Notes:

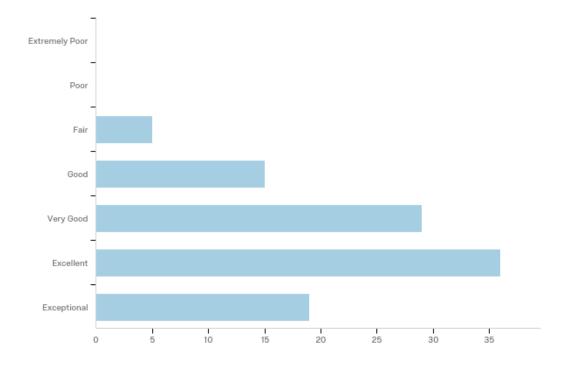
- 1. Data is as of the 3rd week of Fall semester
- 2. Matriculated students have been admitted to graduate programs and have the right to enroll in classes

BYU Department of Public Health

Exit Survey – Master of Public Health – 2014-2019 Summary

How good was the professional training you received in the department:

#	Answer	%	Count
1	Extremely Poor	0.00%	0
2	Poor	0.00%	0
3	Fair	4.81%	5
4	Good	14.42%	15
5	Very Good	27.88%	29
6	Excellent	34.62%	36
7	Exceptional	18.27%	19
	Total	100%	104

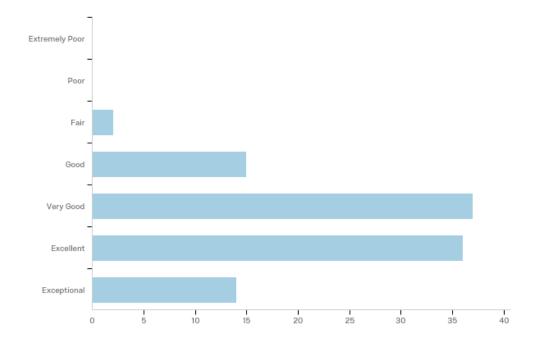


BYU Department of Public Health

Exit Survey – Master of Public Health – 2014-2019 Summary

Please rate the quality of teaching in the department:

#	Answer	%	Count
1	Extremely Poor	0.00%	0
2	Poor	0.00%	0
3	Fair	1.92%	2
4	Good	14.42%	15
5	Very Good	35.58%	37
6	Excellent	34.62%	36
7	Exceptional	13.46%	14
	Total	100%	104

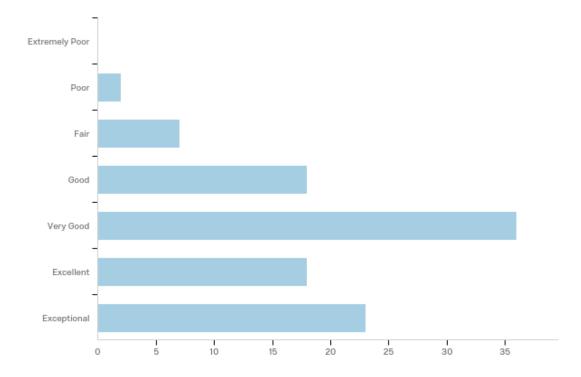


BYU Department of Public Health

Exit Survey – Master of Public Health – 2014-2019 Summary

Please rate the quality of advising in the department:

#	Answer	%	Count
1	Extremely Poor	0.00%	0
2	Poor	1.92%	2
3	Fair	6.73%	7
4	Good	17.31%	18
5	Very Good	34.62%	36
6	Excellent	17.31%	18
7	Exceptional	22.12%	23
	Total	100%	104



BYU Department of Public Health

Alumni Questionnaire Data – Master of Public Health

Senior Survey Data		Cohort Year (Administered 3-years Post Degree)											
		2010		2011		2012		2013		2014			
		N	%	N	%	N	%	N	%	N	%		
Which of the following best describes your current primary occupation?	Employed Full- Time in My Major Field	0	0%	1	25%	3	60%	4	36%	3	60%		
	Employed Full- Time Outside My Major Field	0	0%	2	50%	1	20%	3	27%	2	40%		
	Employed Part- Time	0	0%	0	0%	0	0%	1	9%	0	0%		
	Fill-Time Homemaker	3	60%	0	0%	0	0%	2	18%	0	0%		
	Full-Time Student	2	40%	1	25%	1	20%	0	0%	0	0%		
	Unemployed	0	0%	0	0%	0	0%	1	9%	0	0%		
	Total	5	100%	4	100%	5	100%	11	100%	5	100%		
How would you evaluate	Poor	0	0%	0	0%	0	0%	0	0%	0	0%		
your entire educational experience at BYU	Fair	0	0%	1	25%	0	0%	1	10%	1	20%		
-	Good	2	40%	0	0%	4	80%	3	30%	2	40%		
	Excellent	3	60%	3	75%	1	20%	6	60%	2	40%		
	Total	5	100%	4	100%	5	100%	10	100%	5	100%		
If starting over would you	Definitely No	0	0%	0	0%	0	0%	3	30%	0	0%		
choose to graduate with the same major?	Probably No	0	0%	0	0%	1	20%	1	10%	0	0%		
,	Uncertain	1	20%	0	0%	1	20%	1	10%	1	20%		
	Probably Yes	4	80%	3	75%	2	40%	2	20%	4	80%		
	Definitely Yes	0	0%	1	25%	1	20%	3	30%	0	0%		
	Total	5	100%	4	100%	5	100%	10	100%	5	100%		
	Very Poorly	0	0%	0	0%	0	0%	0	0%	0	0%		

BYU Department of Public Health

Alumni Questionnaire Data – Master of Public Health

	Poorly	0	0%	0	0%	0	0%	0	0%	0	0%
How effectively did your	Fairly Well	0	0%	0	0%	1	33%	2	33%	2	40%
educational experiences at BYU prepare you for your	Quite Well	0	0%	1	100%	1	33%	4	67%	2	40%
current job?	Extremely Well	0	0%	0	0%	1	33%	0	0%	1	20%
	Total	0	0%	1	100%	3	100%	6	100%	5	100%
Describe your activities or plans for further formal schooling.	Finished A Bachelor's, No More Schooling	0	0%	0	0%	0	0%	0	0%	0	0%
	Finished A Bachelor's, Plan on Grad School	0	0%	0	0%	0	0%	0	0%	0	0%
	Finished A Bachelor's, Enrolled in Grad School	0	0%	0	0%	1	20%	0	0%	0	0%
	Finished A Grad Degree, No More Planned	3	30%	2	50%	3	60%	7	64%	3	60%
	Finished A Grad Degree, Planning Another	2	40%	2	50%	1	20%	4	36%	2	40%
	Total	5	100%	4	100%	5	100%	11	100%	5	100%
How effectively did BYU	Very Ineffectively	0	0%	0	0%	0	0%	0	0%	0	0%
prepare you for graduate school?	Ineffectively	0	0%	0	0%	0	0%	0	0%	0	0%
	Effectively	3	60%	2	50%	3	60%	8	89%	4	80%
	Very Effectively	2	40%	2	50%	2	40%	1	11%	1	20%
	Total	5	100%	4	100%	5	100%	9	100%	5	100%
Notes:											

1. The Alumni Questionnaire is administered to graduating cohorts three years following their graduation

2. Use caution in interpreting results based on a small N (particularly N < 15).

BYU Department of Public Health

Faculty Rank and Experience Profile, 2018–2019

		Gender	Full/Part	Rank	Track
Full Time Faculty					
Michael Barnes	Associate Dean	Male	Full-Time	Professor	CFS
Carl Hanson	Chair	Male	Full-Time	Professor	CFS
Rosemary Thackeray	Associate Dean	Female	Full-Time	Professor	CFS
Merrill, Ray		Male	Full-Time	Professor	CFS
Page, Randy		Male	Full-Time	Professor	CFS
West, Joshua H		Male	Full-Time	Professor	CFS
Crookston, Benjamin		Male	Full-Time	Associate Professor	CFS
Hall, Parley Cougar		Male	Full-Time	Associate Professor	CFS
Johnston, James D		Male	Full-Time	Associate Professor	CFS
Magnusson, Brianna Michele		Female	Full-Time	Associate Professor	CFS
Novilla, Maaria Lelinneth					
Lagman Beloy		Female	Full-Time	Associate Professor	CFS
Thygerson, Steven M		Male	Full-Time	Associate Professor	CFS
Sloan, Chantel D		Female	Full-Time	Associate Professor	CFS
Thacker, Evan L		Male	Full-Time	Associate Professor	CFS
Beard, John D		Male	Full-Time	Assistant Professor	CFS Track
Chaney, Robert A		Male	Full-Time	Assistant Professor	CFS Track
Crandall, Aliceann		Female	Full-Time	Assistant Professor	CFS Track
Glenn, Jeffrey Donald		Male	Full-Time	Assistant Professor	CFS Track
Redelfs, Alisha Hayden		Female	Full-Time	Assistant Professor	CFS Track
Spruance, Lori Andersen		Female	Full-Time	Assistant Professor	CFS Track
Adjunct Faculty / Part Time	Teaching				
Ashby, Rachel	F, W	Female	Part-Time	Adjunct	Non-CFS Track
Bird, Patrick R	W	Male	Part-Time	Adjunct	Non-CFS Track
Daley, Dan	F, W	Male	Part-Time	Adjunct	Non-CFS Track
Fabis, Steve	F, W, Sp, Su	Male	Part-Time	Adjunct	Non-CFS Track
Fletcher, Linnea L	F, W	Female	Part-Time	Adjunct	Non-CFS Track
Froelich, Matthew Dale	F	Male	Part-Time	Adjunct	Non-CFS Track
Graul, Magdalynn	Sp	Female	Part-Time	Adjunct	Non-CFS Track
Maughan, Dale	F, W	Male	Part-Time	Adjunct	Non-CFS Track
Page, Tana S	F, W	Female	Part-Time	Adjunct	Non-CFS Track
Roundy, Camille Christa	W	Female	Part-Time	Adjunct	Non-CFS Track
Sowby, Sherm	F	Male	Part-Time	Adjunct	Non-CFS Track
Thygerson, Justin	W	Male	Part-Time	Adjunct	Non-CFS Track
Administration / Staff	Responsibility / Title				
Eyre, Emily	Finance	Female	Full-Time	Administrative/Staff	
Gale, Tanya	Department Administration	Female	Full-Time	Administrative/Staff	
Riggs, Ruth	Graduate	Female	Part-Time	Administrative/Staff	
Advisors					
	Advisor / Career				
Liechty, Beth	Development	Female	Part-Time	Administrative/Staff	
Lutz, Stephanie	Internships / Instructor	Female	Full-Time	Administrative/Staff	Non-CFS Track
Student					

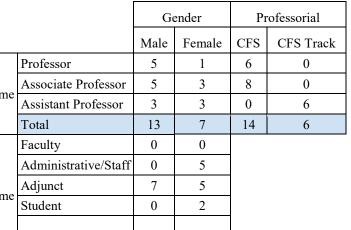
BYU Department of Public Health

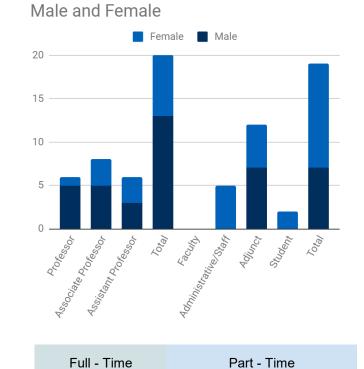
Faculty Rank and	d Experience Pr	ofile, 2018	—2019		
Spencer, Alyssa		Female	Part-Time	Student	
Morrell, Rachel		Female	Part-Time	Student	

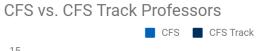
BYU Department of Public Health

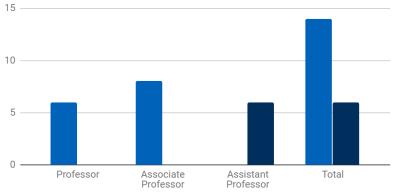
Faculty Rank and Experience Profile, 2018-2019

		Num	ber of Fac	ulty as	of Fall 2018
		Ge	ender	Pr	ofessorial
		Male	Female	CFS	CFS Track
	Professor	5	1	6	0
E 11 4	Associate Professor	5	3	8	0
Full-time	Assistant Professor	3	3	0	6
	Total	13	7	14	6
	Faculty	0	0		
	Administrative/Staff	0	5		
Part-time	Adjunct	7	5		
Part-time	Student	0	2		
	Total	7	12		



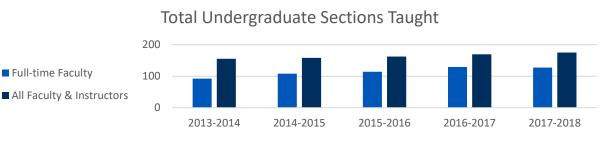




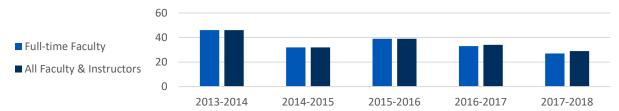


BYU Department of Public Health

Course Sections Taught



Total Graduate Sections Taught



Number	of Sections Taught by	2013	6-2014	2014	-2015	2015	5-2016	2016	-2017	2017-2018		
		UG	Grad	UG	Grad	UG	Grad	UG	Grad	UG	Grad	
NON 'R'	Part-time Instructor	41	0	30	0	26	0	20	0	23	1	
Sections	Full-time Administrator	0	0	0	0	3	0	6	0	10	0	
	Full-time Faculty	63	12	73	12	79	12	82	12	82	11	
	Unknown	0	0	0	0	2	0	2	0	0	0	
	Total	104	12	103	12	110	12	110	12	115	12	
R' Sections	Part-time Instructor	22	0	20	0	4	0	2	0	3	0	
	Full-time Administrator	0	0	0	0	12	0	10	0	12	0	
	Full-time Faculty	29	34	35	20	35	27	47	21	45	16	
	Unknown	0	0	0	0	1	0	0	1	0	1	
	Total	51	34	55	20	52	27	59	22	60	17	
ALL Sections	Part-time Instructor	63	0	50	0	30	0	22	0	26	1	
	Full-time Administrator	0	0	0	0	15	0	16	0	22	0	
	Full-time Faculty	92	46	108	32	114	39	129	33	127	27	
	Unknown	0	0	0	0	3	0	2	1	0	1	
	Total	155	46	158	32	162	39	169	34	175	29	

Notes:

1. Data is collected following university faculty reconciliation as to who is teaching each section for each semester/term within each academic year.

2. Categorization of faculty is based on 'primary' instructor.

3. Part-time faculty includes adjunct and administrative/staff.

4. Labs 'for credit' are included.

5. Does not include sections with zero enrollments.

6. Cross-discipline sections are counted within each discipline.

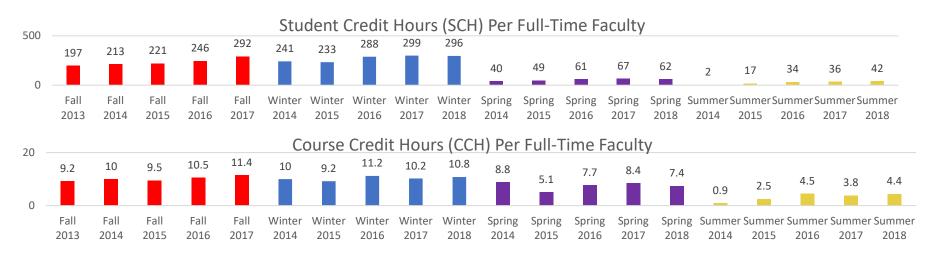
7. The differences between undergraduate and graduate faculty status are based on type of compensation. Some faculty who are normally on full-time status may be otherwise identified based on their type of compensation (i.e., supplemental contract, Continuing Ed. Contract, etc.).

BYU Department of Public Health

Course Sections Taught

BYU Department of Public Health

Student and Course Credit Hours Per Full-Time Faculty Member



	l.	Fall					Winter					Spring					Summer			
Credit Hours/Head Counts	2013	2014	2015	2016	2017	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Dept Student Credit Hours	5,144	5,060	4,816	5,224	5,724	5,263	4,879	5,717	5,877	5,714	944	1,077	1,048	1,201	1,213	505	583	741	677	788
Dept Course Credit Hours	205	218	204	217	227	202	190	217	200	211	162	108	128	145	130	50	72	85	68	84
FT Faculty Student Credit Hours	2,951	3,410	3,541	4,176	4,957	3,609	3,728	4,601	5,082	4,731	594	790	973	1,141	997	25	260	576	620	710
FT Faculty Course Credit Hours	138	160	152	179	194	150	148	180	174	174	133	82	122	142	118	15	38	76	65	75
FT Faculty Headcount	15	16	16	17	17	15	16	16	17	16	15	16	16	17	16	16	15	17	17	17
Ratios																				

SCH Per FT Faculty Headcount	343	316	301	307	337	351	305	357	346	357	63	67	65	71	76	32	39	44	40	46
CCH Per FT Faculty Headcount	13.7	13.6	12.7	12.8	13.4	13.5	11.9	13.6	11.8	13.2	10.8	6.8	8	8.6	8.1	3.1	4.8	5	4	4.9
FT SCH Per FT Faculty	197	213	221	246	292	241	233	288	299	296	40	49	61	67	62	2	17	34	36	42
FT CCH Per FT Faculty	9.2	10	9.5	10.5	11.4	10	9.2	11.2	10.2	10.8	8.8	5.1	7.7	8.4	7.4	0.9	2.5	4.5	3.8	4.4

Notes:

1. SCH & CCH data is as of the 3rd week of each semester/term. [SCH is defined as the total number of credit hours taken by students in a course.]

2. Full-time faculty headcount as of November of the given academic year, is acquired from HR, and defined as those on contract minus those on leave.

BYU Department of Public Health

Faculty Performance Indicators

Faculty Performance	e Indicators			D	ata as of +	1-Jun-18							
	2012	2013	2014	2015	2016	2017	2018						
Productivity Index B*	· · · ·												
Unit	3.38	2.89	2.56	2.16	2.00	2.14							
College	2.71	2.75	2.94	2.24	2.40	2.30							
University	2.57	2.29	1.70	1.82	1.74	1.97							
Activity Index**													
Unit	1.00	0.83	0.83	0.84	0.75	0.86							
College	0.84	0.87	0.84	0.80	0.84	0.80							
University	0.68	0.64	0.63	0.66	0.67	0.68							
Conversity 0.08 0.04 0.05 0.06 0.07 0.08 Fotal Publications (peer-reviewed/refereed) and Creative Works (peer-reviewed/refereed)***													
Unit	54	52	46	41	40	45							
College	362	371	412	310	332	324							
University	3358	3018	2324	2480	2385	2699							
Presentations													
Unit	40	37	45	29	55	53							
College	465	479	450	395	468	556							
University	4023	3929	3075	3295	3320	3489							
Number of faculty with	n at least one	Publication	or Creative	Work									
Unit	16	15	15	17	15	19							
College	118	126	124	119	118	119							
University	889	842	922	949	977	992							
Number of faculty with	n an expectati	ion for schol	arship****										
Unit	16	18	18	19	20	21							
College	129	130	135	136	134	139							
University	1305	1316	1323	1327	1331	1323							

Notes: '+' 'Data as of' Date is the date the data was pulled from BYU Faculty Profile. Numbers are subject to change.

*Productivity Index B uses as its numerator number of peer-reviewed/refereed publications and creative works by faculty with an expectation for scholarship. Its denominator is number of faculty with an expectation for scholarship.

The Activity Index uses as its numerator number of faculty with an expectation for scholarship with at least one peer-reviewed/refereed publication or creative work. Its denominator is number of faculty with an expectation for scholarship. *The total includes all peer-reviewed/refereed publications and creative works by all faculty (full-time and adjunct) as of the date this report was run. Works co-

authored by two or more BYU faculty in the same department or college are counted just once per unit. Works co-authored by two or more BYU faculty members in different departments and/or colleges are counted multiple times at the department and-or college level, (once for each unique unit) but only once at the university level.

****Scholarship expectations are determined by the relevant dean's office and entered on the Faculty Profile yearly BYU Personnel Information screen.

Comparing this Faculty Profile Report with the ORCA Report

Although this report is patterned after the earlier ORCA report (last published in 2008), the two reports are not the same. This report includes all publications and creative works that are marked as peer-reviewed/refereed in Faculty Profile. For the ORCA report, the dean's office of each college decided which publication and creative works to include based on which works "meet the expectations of scholarship of the departments and disciplines involved." For both this report and the former ORCA report, colleges were asked to identify which of their faculty had scholarship expectations.



planningandassessment.byu.edu 801.422.4919