

2019-2021 Biological Sciences: Health Sciences Annual Assessment Report
Updated September 2021

I. Annual Assessment Meetings:

October 16, 2019 1 hour: Lindsay Burwell, Leah Elliott, Kevin Ergil, Deborah Gagnon, Sarah Markowitz, and Linda Galbato. Discussed the formation of a medical terminology course and several proposed courses that would be crossed-listed with Women's and Gender Studies. Kevin had been approached by faculty members in that department with the course ideas.

September 2020: Leah Elliott began shared electronic documents to gather the usual meeting times for Health Science courses as well as which semesters they are typically offered. This will allow the program to assess if courses are being offered to allow students to easily progress through the degree and suggest times and semesters when new courses can be offered to ensure healthy enrollments. Lindsay Burwell and Deborah Gagnon added information throughout the month

January 19, 2021 1 hour: Lindsay Burwell, Leah Elliott, Kevin Ergil, Deborah Gagnon and Linda Galbato. Finalized changes to the Health Science major based upon Leah's changes to the Biology major and the courses she will be teaching going forward. The entire major was reexamined to remove courses no longer being offered and to reflect new offerings, while staying within the amount of changes allowed by New York State. Also discussed was a new course in medical research design and assessment that we might offer in the future.

February 4, 2021, 1hour: attendees: Lindsay Burwell, Leah Elliott, Kevin Ergil, Deborah Gagnon and Linda Galbato. Reviewed the changes to the Health Sciences major again. Discussed the assessment for this year: who would write it and that the program will undergo review in the next academic year through EPC.

II. Closing the Loop

The Health Science Committee agreed to work on the following points for the Biological Sciences: Health Sciences program during 2019-2020 and 2020-2021 academic years. However the COVID-19 pandemic and departure of key faculty members Sarah Markowitz and Christina Schmidt at the end of Spring 2020 and of our Director Kevin Ergil necessitated flexibility and caused some changes in focus from what was proposed in the 2018-2019 assessment report.

The Health Science Committee planned to work on the following points for the Biological Sciences: Health Sciences program during 2019-2020 academic year.

1. Assess **Goal 6- Help students to understand the importance of multiple perspectives through collaborative learning where different opinions are included, valued, respected, and considered.** **Objective 1- Students will understand cultural differences and multicultural perspectives** through assignments in a new of a Bioethics special topics course (HS 285 in Fall 2019).
2. Assess **Goal 3- Train students to communicate in a clear, coherent, and effective manner in both written and oral form.** **Objective 1- Students will demonstrate effective written communication.** **Objective 2- Students demonstrate effective visual and oral communication to their peers, the Wells community, and the general public** after extensive restructuring of our capstone course HS401 in Fall 2018.

3. Assess the effects of academic advising and information sessions in the 2018-2019 academic year on the associated minors in Health & Medical Ethics, Holistic Health, Cognitive & Brain Science, and Health Care Management.

III. Examination of Data Collected for this year's targeted learning outcomes:

1. To assess **Goal 6- Help students to understand the importance of multiple perspectives through collaborative learning where different opinions are included, valued, respected, and considered.** **Objective 1- Students will understand cultural differences and multicultural perspectives** Leah Elliott offered a special topics course in Fall 2019: HS 285 Bioethics. Several assignments in that course had students focus on cultural differences in bioethics. As this was a new course and newly created assignments, the criteria for success were set at 70% of student receiving a grade of C or higher (as indicated in the table below)

How Outcome is Measured	Measurement Tool	Success Criteria
Perspectives round table	Locally developed rubrics	70% received C or higher
Reflection on <i>The Spirit Catches You and You Fall Down</i>	Locally developed rubrics	70% received C or higher

The perspectives round table had each student choose a bioethical view different from the American framework discussed in the course (and the basis for human subject research in this country). Students all choose perspectives and groups different from themselves: traditional Chinese medicine, Buddhist, Hindu, African, Afro-Caribbean, and Catholic (as seen through a Latin American lens). It is important to note that the American framework does not explicitly lean on any religious framework or tradition. The assignment required students to summarize the guiding philosophy for their perspective and then apply those to a pair of ethical case studies. In class students took on the role of experts and explain their perspective to their classmates and discussed one of the case studies. The in-class discussion was so lively and engaging to the students that there was no time to consider the other case study. For the written portion of this assignment, 17% of students receive an A, 33% a grade in the B range, 33% a grade in the C range and 17% received a grade less than a C. This did hit our goal, with 83% of students achieving at least C level responses.

A later assignment in the course asked students to reflect on the cultural differences in medicine illustrated in the book *The Spirit Catches You and You Fall Down*. This book explores the case of a Hmong refugee family who had a young child diagnosed with severe epilepsy and the tensions caused by language barriers, different spiritual beliefs, cultural expectations, and medical traditions. On this assignment 40% of students received an A, and 40% a grade of C+ or C. While this exceeds our criteria for success, the strong bimodal grades suggest that more work could be done to bring students to a more nuanced understanding of this case. As before, the in-class discussion was lively and helped to draw out some points not seen in the written responses.

One student's comments on the course evaluations directly spoke about students experience with this Objective: "I think having this be a discussion based class is incredibly helpful to learn and explore all of the different perspectives. ... Having guests come in to talk about different perspectives from other countries instead of just focusing on the western lens is also really helpful as well." Kevin Ergil gave a guest lecture on Taoist philosophies and traditional Chinese medicine.

Another comment illustrates our students' interest in this Goal and Objective: "I thought this was an incredibly useful class to have and honestly should be a requirement for health science majors. Maybe even exploring an ethics class in general. I think having that perspective and respectful learning environment to discuss controversial topics that happen in real life is incredibly important. This class allows for students to explore their own morals and ideals while also challenging them in a productive manner without bashing on views. Having this be a requirement is crucial for building lives outside of Wells not only for personal reasons, but some grad schools require an ethics course prior to entry. Please make this a requirement in all majors, it is incredibly valuable."

2. Initially the Health Science Committee's plan was to assess the effect on restructuring HS401 had on student writing and communication, particularly ***Goal 3- Train students to communicate in a clear, coherent, and effective manner in both written and oral form. Objective 1- Students will demonstrate effective written communication. Objective 2- Students demonstrate effective visual and oral communication to their peers, the Wells community, and the general public.*** Several circumstances made this difficult to fulfill. In the past two academic years, 2019-202 and 2020-2021, two different faculty members taught HS401 making standardization of assignments, grading criteria, etc. difficult. It will be difficult to compare either year to this year as the Fall 2020 course was taught by Kevin Ergil, who left at Wells this summer with little notice and we have had to divide the HS401 students between two other capstone courses due to the faculty all teaching full loads this semester. The general struggle of students during Fall 2020 also impacted students' ability to successfully complete the course as they normally do, with two students being granted incompletes. This is a very unusual situation for HS401 and suggests more systemic issues in the semester or the course as it was offered, making comparisons with other semesters fraught.

Outcome	How Outcome is Measured	Measurement Tool	Success Criteria
3.1	HS401 Senior Thesis	Locally developed rubric	100% receive a C or higher
3.2	HS401 Senior Thesis Poster presentation	Locally developed rubric	100% received C or higher

3. After making substantive changes to the Health & Medical Ethics (previously science, health, and values) and Holistic Health minors efforts were in the 2018-2019 academic year to increase campus knowledge of these and other associated minors. To assess these efforts and the impact of our changes we tracked the number of students adding minors in Health & Medical Ethics, Holistic Health, Cognitive & Brain Science, and Health Care Management.

Minor	Spring 2018	Spring 2019	Spring 2020	Spring 2021
Holistic Health	1 student	4 students	4 students	3 students
Cognitive & Brain Science	8 students	5 students	2 students	2 students
Health Care Management	3 students	6 students	6 students	5 students

Please note that the Health and Medical Ethics minor is not present in the report options on The Globe, making it impossible for use to report the numbers of minors. The Science, Health, and Values minor is not present either.

In general, minors associated with the Health Science major and program saw an increased number of declarations in the 2018-2019 academic year, when the Health Science Committee made efforts to promote the minors and increase awareness of them. However, that awareness did not pass from student-to-student in the following years and number of minors remained steady or declined as students graduated. This shows the importance of events and informational sessions in gaining minors. It is possible that the distancing required during the COVID-19 pandemic reduced student discussions and that more informational sessions held this coming year or in the 2022-2023 academic year could yield more general student knowledge and interest in these minors.

IV. Program Changes for the Upcoming Year

After the loss of Kevin Ergil, Lindsay Burwell and Deborah Gagnon have taken on HS403 Senior Seminar and Breanna Jones will teach HS201 Medical Terminology. Leah Elliott had planned to offer HS285 Bioethics for a second time to gauge student interest and work it into a regularly offered class. However, this may not be possible based on the course offering needs of both Health Science and Biological and Chemical Sciences. We will also work with the new Biology faculty member, Tom Jensen, as he reworks or structures core health science courses including BIOL 214L Anatomy and Physiology. Leah Elliott is also offering new Biology courses which impact the major and its assessment. In addition, we are requesting another full time Health Science faculty member to teach courses that are prerequisites for graduate programs in the Health Professions, like Human Nutrition. The addition of another faculty member will also provide more consistency to the Senior Seminar and Medical Terminology courses.

V. Action Plan for the Upcoming Year

1. Considering the sudden shift to hybrid, remote and other unusual to Wells methods of instructions in the past three semesters, we will focus on assessing ***Goal 1. Provide an interdisciplinary undergraduate program that prepares students with the knowledge and skills necessary to pursue a career within the health professions*** in the 2021-2022 academic year. With the turnover of faculty members in Psychology and Biology it may not be possible to compare achievements this year and pre-pandemic semesters. Ideally all three Objectives to this goal will be assessed, as staffing and course offerings allow.

2. We will need to carefully revisit our Assessment Plan and the assignments we use to assess our Goals and Objectives in light of changes to faculty and staff, and course offerings in the program.