

Exercise Science and Sports Studies; Goal 4 Assessment (AR 15-16)

Goal #4: A student that graduates from CSB/SJU with a minor degree in Exercise Science and Sport Studies will demonstrate ability to make ethically reasoned decisions relative to sport and exercise science.

Summary of assessment results:

Method #1: Student Achievement Data

The ESSS Department utilizes two methods of developing students' ability to make reasoned ethical decisions relative to sport and exercise: application of professional ethics and exploration of competing ethical approaches through a CSB/SJU Common Curriculum designated course. Because the ethical decision making process is distinctly different for the professional ethics, which tends to be more prescriptive compared to the exploratory approach used in the Common Curriculum course and could result in potentially different decisions based on the ethical approach utilized, the ESSS Department decided to apply two separate assessment methods to evaluate the students' ability to make ethically reasoned decisions.

Students' ability to make reasoned ethical decisions using professional ethics, or more specifically research ethics, was assessed through the completion of the Collaborative Institutional Training Initiative (CITI) Student Researcher and Belmont Report modules and subsequent quizzes, and the ability of students to develop an informed consent document consistent with CSB/SJU Institutional Review Board (IRB) standards. Student work was collected from all students enrolled in ESSS 215, 306, 308, and 396 (Category B courses). The mean score on the Belmont Report module ($n = 32$) was 100% (± 0) while the mean score on the Student Researcher module ($n = 28$) was 92.1% (± 9.2) with a range of 80% to 100%. All students scored above the minimum 80% to "pass" each of the research ethics modules. [Note: four students did not complete the Student Researcher module and, instead, completed a series of surveys intended for faculty researchers. Because there was no practical way to integrate the scores from the four students, only the scores from the Belmont Report module were included.] Informed consent documents were also collected from students enrolled in ESSS 215, 306, 308, and 396. Within the ESSS 215, 306, and 308 courses, the informed consent documents were constructed by groups of students, while the students enrolled in ESSS 396 created the documents individually. The informed consent documents were evaluated by one or more of the CSB/SJU IRB. All 16 informed consent met CSB/SJU IRB standards. [Note: The informed consent documents were typically revised several times, based on peer and instructor feedback, prior to being submitted for assessment. Also, all the students enrolled in ESSS 396 had previously completed ESSS 306, ESSS 308, or a course in another department that emphasizes research ethics, including the development of informed consent documents.]

Students' ability to make reasoned ethical decisions using competing ethical approaches was assessed through a final exam essay in the ESSS 390 course, a CSB/SJU Common Curriculum designated course. In the final exam, students were provided a scenario involving the use of a performance enhancing supplement prior to a major competition. Students were first ask to identify all the ethical dilemmas associated with the scenario. Then students were asked to select two of the dilemmas identified and make ethical decisions based on three predetermined ethical approaches: Deontology, Utilitarianism, and Teleology. The students' work was evaluated by three ESSS faculty members using a modified version of the ETHICS COMMON SEMINAR ASSESSMENT RUBRIC (see below). Since two of the faculty

members have minimal experience in applying the three ethical approaches, a group evaluation process was employed. Each evaluator read the same student’s essay and identified an initial score in each of the two goal evaluation areas. Then, the initial scores were compared and discussed until consensus scores were reached. This process continued until all the essays were evaluated. Therefore, the assessment score presented here reflect a group consensus decision, rather than an average of the evaluators’ scores.

**Ethically Reasoned Decisions
ESSS ASSESSMENT RUBRIC**

Adapted from the CSB/SJU Ethics Common Curriculum Rubric

	Unacceptable 1 pt	Marginally Acceptable 2 pts	Acceptable 3 pts	Above Average 4 pts	Exemplary 5 pts
<i>Identifies Ethical Issues</i>	Demonstrates little understanding of what ethical issue is at stake	Recognizes an ethical issue, but does little to explain what is at stake	Describes one or more relevant ethical issues and offers some explanation	Explains most relevant ethical issues with some degree of nuance and development	Offers a detailed explanation of all or most of the ethical issues involved
<i>Articulates Coherent Arguments</i>	Advances conclusions with little or no argumentation	Advances conclusions and asserts opinion as support	Offers a logically structured argument of premises and conclusions	Offers a valid argument grounded in a scholarly perspective, but lacks some depth of development	Offers and well-reasoned, valid argument well-grounded in a scholarly perspective.

A total of 36 student essays were collected from two sections of ESSS 390 and 10 essays were randomly selected for evaluation. Mean score on “Identifies Ethical Issues” was 3.35 (± 1.1) with a range of 2 to 5 and the mean score on “Articulates Coherent Arguments” 3.85 (± 0.9) with a range of 2 to 5. The mean composite score was 7.2 (± 1.8) with a range of 4 to 10.

Method #2: Students' Perception of Learning

In the spring of 2014, 2015, and 2016 combined, 23 graduating ESSS senior students completed the department's exit survey. Included in the survey was the following prompt pertaining to the development of ethical decision making skills to which the students responded Strongly Disagree, Disagree, Agree, or Strongly Agree.

"ESSS courses helped me develop my ability to make ethically reasoned decisions relative to sport and/or exercise science."

A total of 35 graduating senior students responded to the survey. Of the 35 respondents, 17 students responded "Strongly Agree" and 18 students responded "Agree".

Method #3: Graduates' Perception of Learning

The ESSS Department graduates were not surveyed in 2015-16. Therefore, there are no results to report relative to Method #3. The ESSS department will be undergoing program review in 2019-20. It was decided to postpone surveying graduates until 2018-19.

Method #4: Independent Third Party Evaluation

Within the ESSS 215, 306, and 308, courses, students are placed in groups and develop their own research projects specific to the nature of their particular course. Part of the process of conducting the course-based research is receiving IRB approval prior to recruiting subjects. In total, 10 research groups (30 students) were able to satisfactorily meet the IRB criteria for the ethical treatment of human subjects. The students in the ESSS 316 course have not yet received formal IRB approval for their research studies, but will work to do so over the summer or during fall semester.

In 2015-16, nine ESSS students completed the ESSS 397 Internship. During the site visits, internship site supervisors were asked about the behavior and decision making of the CSB/SJU intern at their facility. One site supervisor reported poor communication and time management in completing internship responsibilities, but no specific unethical behavior. The other eight site supervisors reported no ethical behavior or decision making issues/problems during the internships.

Analysis:

Overall, ESSS students demonstrated relatively strong ethical decision making abilities.

In terms of professional (research) ethics, students were able to meet the ethical standards set by the CSB/SJU IRB. It is important to note that the ESSS 215, 306 and 308 students were working in groups, so the results reflect a group effort rather than the ability of each individual student. The students completing ESSS 396 completed individual research projects, so the results from ESSS 396 reflects each student's ethical decision making ability. The ESSS Department is very

pleased with these results and we do not see a need to make changes to the curriculum, course instruction, or assessment process.

As a whole, the students' also demonstrated at least an acceptable ability to make reasoned ethical decisions using competing ethical approaches. The ESSS Department, in general, is pleased with these results. However, it is important recognize that, while the average score met the "acceptable" standard, several students fell below "acceptable" in their ability to identify ethical issues and/or ability to articulate a coherent argument. Additionally, two students were "marginally acceptable" in their composite score.

Students view the ESSS curriculum as enhancing their ability to make ethically reasoned decision, which the ESSS Department believes is important.

Finally, external third party evaluations indicate the ESSS students are able to effectively apply their ethical decision-making in real-world settings, which ultimately is the most important piece of evidence supporting the achievement of the ethical decision making goal.

Recommendations:

The following recommendations are made based on the results of the 2015-16 assessment findings:

1. No changes will be made to the curriculum or assessment process.
2. No changes will be made to the instruction of professional (research) ethics in the ESSS 215, 306, 308, or 396 courses.
3. The ESSS 390 course instructor will look for ways to identify students who struggle to identify ethical issues and/or make coherent arguments earlier in the course and then work with those individuals to ensure they meet at least the acceptable standard on the final exam.
4. The ESSS Department will continue to stress the importance of professionalism, including appropriate communication and time management, in completing internships and all experiential learning.