Form E-1-A for Boston College Core Curriculum

Department/Program __Psychology & Neuroscience____

1) Have formal learning outcomes for the department's Core courses been developed? What are they? (What specific sets of skills and knowledge does the department expect students completing its Core courses to have acquired?)

Learning Goal 1: Students will acquire a basic understanding of the topics studied and the methodologies used in the field of psychology.

- Learning Outcome 1a: Students will be able to demonstrate a general knowledge of theories, concepts, and findings in at least one subfield of psychology.
- Learning Outcome 1b: Students will understand better some of the different methodological approaches, paradigms, and technologies that have been used to study psychological processes.

Learning Goal 2: Students will gain critical thinking and writing skills and put them to use through the process of scientific inquiry.

- Learning Outcome 2a: Students will be able to consider competing hypotheses and to understand how data can adjudicate among those hypotheses.
- Learning Outcome 2b: Students will be able to evaluate critically contemporary data relating to psychology including media claims and graphical depictions of data.
- Learning outcome 2c: Students will be able to summarize psychological theory and research in concise accurate scientific writing.

Learning Goal 3: Students will acquire a better understanding of how psychological research methods are used to address perennial questions in psychology.

- Learning Outcome 3a: Students will be able to see how psychological study is complementary to other approaches to understanding and reflecting on the human condition.
- Learning Outcome 3b: Students will be able to express how the material learned is relevant to aspects of their daily lives, such as their behaviors and their interactions with others.

Learning Goal 4. Students will acquire skills to help them succeed in their personal and community lives after graduation.

- Learning Outcome 4a: Students will be able to demonstrate an appreciation of the ethical issues involved in human or animal research.
- Learning Outcome 4b: Students will be able to understand better themselves and others.
- 2) Where are these learning outcomes published? Be specific. (Where are the department's expected learning outcomes for its Core courses accessible: on the web, in the catalog, or in your department handouts?)

The goals and outcomes are published on the department website and in appropriate handouts distributed by the department.

- 3) Other than GPA, what data/evidence is used to determine whether students have achieved the stated outcomes for the Core requirement? (What evidence and analytical approaches do you use to assess which of the student learning outcomes have been achieved more or less well?)
 - 1) An anonymous survey of students who take psychology core courses.
 - 2) Evaluation of ratings and comments on student course evaluations.
 - 3) Direct evidence based on evaluation of samples of two kinds of student work:
 - a) Appropriate papers written by the students.
 - b) Appropriate essay questions on exams.
- 4) Who interprets the evidence? What is the process? (Who in the department is responsible for interpreting the data and making recommendations for curriculum or assignment changes if appropriate? When does this occur?)

The Undergraduate Assessment Committee meets each year to review the results, both qualitative and quantitative, and to discuss changes that might be implemented to improve student learning. Analyses typically focus on the results of specific changes that had been implemented on the basis of earlier analyses. The committee also discusses the strengths and weakness of the assessment procedures and consider potential changes in the procedures including the goals and the methods to evaluate them. In addition to the analyses of the department's Undergraduate Assessment Committee, suggestions for improvement in undergraduate teaching are solicited from students, course instructors, and thesis advisers. Finally, the Committee's findings are presented to, and further discussed by, the Department as a whole at a full meeting of the Departmental Faculty.

5) What were the assessment results and what changes have been made as a result of using this data/evidence? (What were the major assessment findings? Have there been any recent changes to your curriculum or program? How did the assessment data contribute to those changes?

A clerical error resulted in the failure to distribute the Core outcomes survey to students who completed our Core courses in the '22-'23 AY. Thus, we focused heavily this year on an analysis of the student course evaluations for our Core courses. Generally, these courses were well-received by students, with average ratings (on a 5 pt scale) for our PSYC1111 course of 4.3 for the quality of the course, and 4.5 for the quality of the instruction. The ratings for PSYC1110 sections were more modest, with average ratings of 3.46 for the course and 3.69 for the quality of the instruction. Qualitative analyses of student comments from these courses suggest strong support for success in students learning of factual data and methodologies in the field (LOs 1a and 1b), as well as how to evaluate empirical data and relate it to theory (LOs 2a and 2b). This latter result is rewarding, as our PSYC1110 and PSYC1111 instructors have recently refreshed these courses, focusing especially on having students directly evaluate both landmark and recent empirical outcomes. Based on prior evidence, we have also reinvigorated our peer mentoring for instructors, with a specific focus on teaching empirically-rigorous content. Student comments also suggest substantial achievement of LOs 3a and 3b, focusing on perennial important questions; they know what the "big" questions in the field are, and why they are important. Comments from students in both courses suggest an understanding of ethical issues in the field (LO 4a), and especially for those students PSYC1110, the issues related to animal research. Comments from students in PSYC1111 provided particularly strong evidence of achievement for LO 4 – understanding themselves. Comments from students in PSYC1110 represented a more compartmentalized view (i.e., focusing on localized functional neuroanatomy), though a handful of comments suggested the students were drawing back to a bigger picture of how this affects their own behavior. PSYC1110 instructors plan to reinforce this in future offerings. As has been the case for years, the weakest evidence of success was for discipline-specific

writing skills (LO 2c). However, since our number of student majors has nearly doubled in the last five years, and we continue to contribute heavily to offering seats in both Social Science (PSYC1111) and Natural Science (PSYC1110), our course rosters are 100 students at a minimum, and most sections stand closer to 250 or 275 students. With courses of this size, instructors have had to adapt to pedagogy that does not allow much in the way of instruction on science writing. Finally, we note a substantial drop in student ratings for PSYC1110 offerings, as well as commensurate changes in the student comments from mostly positive to a mix of positive and negative. For example, from AY20-21 to AY21-22, one PSYC1110 instructor's course ratings dropped from 4.06 to 3.73 for the overall rating of the course, and from 4.41 to 4.13 for the rating of the instruction. The two other PSYC1110 instructors saw similar declines in ratings. Comments on student course evaluations suggest that the change of Core designation for this course from Social Science to Natural Science may be an important factor. Many negative student comments focus on the heavy biological nature of the material. We strongly believe that we are teaching the right content, though, and are now focusing on ensuring that students who take this course as a Natural Science Core class understand that it will indeed 'feel' like other Natural Science courses, and not more Social Science. (Common comments read something like "Too much biology for a Psychology course" or "I was excited to find a Natural Science Core in Psychology, but this was just a Biology class.") Again, we feel we need to do a better job of setting student expectations at the outset of these PSYC1110 courses.

6) Date of the most recent program review. (Your latest comprehensive departmental self-study and external review.)

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