

Program-Level Assessment: Annual Report

Program Name (no acronyms): Medical Anatomy and Physiology, GR Certificate

Department: Center for Anatomical Science and Education (CASE)

Degree or Certificate Level: Certificate

College/School: School of Medicine

Date (Month/Year): 1/24

Assessment Contact: John Martin

In what year was the data upon which this report is based collected? 2022-23

In what year was the program's assessment plan most recently reviewed/updated? 2023

Is this program accredited by an external program/disciplinary/specialized accrediting organization or subject to state/licensure requirements? No

If yes, please share how this affects the program's assessment process (e.g., number of learning outcomes assessed, mandated exams or other assessment methods, schedule or timing of assessment, etc.):

1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please provide the complete list of the program's learning outcome statements and **bold** the SLOs assessed in this cycle.)

Last year the MAPP program underwent University Academic Program Review (APR) that included review by two external reviewers. Since the entire program underwent comprehensive review and assessment, no specific student outcomes were assessed in 2022 as every aspect of the program was the subject of APR.

2. Assessment Methods: Artifacts of Student Learning

Which artifacts of student learning were used to determine if students achieved the outcome(s)? Please describe the artifacts in detail, identify the course(s) in which they were collected, and if they are from program majors/graduates and/or other students. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

For the purpose of APR, the Anatomy Academic Program Review Committee prepared 62-page self-study of all Anatomy programs, including the MAPP program, discussing both strengths and weaknesses of all aspects of the MAPP program.

3. Assessment Methods: Evaluation Process

What process was used to evaluate the artifacts of student learning, and by whom? Please identify the tools(s) (e.g., a rubric) used in the process and **include them in/with this report document** (please do not just refer to the assessment plan).

External reviewers used this document and the information collected during their on-site visit to prepare their Academic Program Review document.

4. Data/Results

What were the results of the assessment of the learning outcome(s)? Please be specific. Does achievement differ by teaching modality (e.g., online vs. face-to-face) or on-ground location (e.g., STL campus, Madrid campus, other off-campus site)?

The executive summary of external reviewers' comments on the MAPP program is pasted below:

We were invited to review St Louis University's Center for Anatomical Science and Education (CASE) on April 3rd and 4th, 2023. We appreciated the well-structured visit and ample opportunities to meet with administration, faculty, and students. Below is a brief summary of our primary findings with more details in the subsequent sections which follow

the rubric that was provided. Recommendations are noted at the end of the document.

Strengths

1. Students in all programs have an opportunity to participate in dissection-based anatomy courses taught at a very high professional level (see section I-10)
2. CASE leadership (see section V-1)
3. Faculty and student dedication to teaching (see sections I-4, II-1, and III-3)

Challenges and Opportunities

1. Faculty teaching load that limits opportunities for faculty and student scholarship (see sections II-2 and II-3), while expectations for promotion are still based on research activity (II-1)
2. Faculty development and intramural funding opportunities for CASE faculty are limited and could be expanded to encourage faculty to engage in various types of scholarly activities (see section II-2)
3. Matriculation ratio of MAPP graduates into the medical program is rather low (9%), which can be addressed by either increasing entry requirements or providing more career advisement (see section I-4)
4. Student professional development (particularly research methods and career advisement) within existing curriculum could be expanded (see sections I-4, I-7, and III-2)

5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you? Address both a) learning gaps and possible curricular or pedagogical remedies, and b) strengths of curriculum and pedagogy.

CASE has identified the following steps to address concerns identified in the external review process.

1. Expand on research footprint and productivity of CASE faculty.
2. Expand on research training of MAPP students and through further development of journal club and/or seminar series.
3. Submit justification to SOM administration for additional faculty positions to begin faculty recruitment in order to better serve academic and research needs of MAPP students.
4. Examine admissions requirements for MAPP program and consider more stringent qualifications. In fact, in collaboration with SOM administration, the MAPP program will be completely revamped through the formation of a new MS in Medical Science program.
5. Begin a MAPP curricular review of during AY 2023-2024. This will be done in conjunction with formation of the new MSMS program curriculum.
6. Consider implementation of a more robust "exit interview" for students who complete the MAPP program while developing a similar survey for the new MSMS program.

6. Closing the Loop: Dissemination and Use of Current Assessment Findings

A. When and how did your program faculty share and discuss the results and findings from this cycle of assessment?

The CASE self-study document in addition to the external review document and a document containing the CASE response to external reviewers, which was written by representatives from CASE staff and faculty, were distributed to faculty for their review. Some of these items were discussed directly at faculty meetings. Recently, a letter from the office of the Provost assessing our external review, and the CASE response, was shared with CASE faculty during a faculty meeting.

B. How specifically have you decided to use these findings to improve teaching and learning in your program? For example, perhaps you've initiated one or more of the following:

Changes to the Curriculum or Pedagogies

- Course content
- Teaching techniques
- Improvements in technology
- Prerequisites

- Course sequence
- New courses
- Deletion of courses
- Changes in frequency or scheduling of course offerings

Changes to the Assessment Plan

- Student learning outcomes
- Artifacts of student learning
- Evaluation process

- Evaluation tools (e.g., rubrics)
- Data collection methods
- Frequency of data collection

Please describe the actions you are taking as a result of these findings.

The MAPP certificate program will only exist for one more academic year. It will be replaced by a 12 month MS program (MS in Medical Science) to begin in the Summer of 2025.

If no changes are being made, please explain why.

N/A

7. Closing the Loop: Review of Previous Assessment Findings and Changes

A. What is at least one change your program has implemented in recent years as a result of previous assessment data?

CASE faculty and course directors have modified active learning sessions and provided additional opportunities for active learning in all MAPP courses.

B. How has the change/have these changes identified in 7A been assessed?

Nearly daily interaction with MAPP students occurs during active peer instruction sessions. These sessions involve discussion between peers, but also with faculty members. Faculty members assess understanding and application of material during these interactions thus assessing the success of active learning in real time rather than waiting for the results of a written or laboratory examination.

C. What were the findings of the assessment?

Assessment of peer instruction active learning implementation is not complete. The process and effectiveness are evaluated nearly every semester in order to make appropriate changes in an effort to meet course and program objectives. Collaborative research projects involving CASE faculty and the SOM office of curricular affairs are currently underway. This ongoing research will help assess peer instruction in the MAPP program.

D. How do you plan to (continue to) use this information moving forward?

With the development of an the MSMS program and the dissolution of the MAPP program CASE administration will work collaboratively with the SOM office of curricular affairs as well as the office of student affairs to implement an appropriate curriculum containing an adequate student support structure.

IMPORTANT: Please submit any assessment tools (e.g., artifact prompts, rubrics) with this report as separate attachments or copied and pasted/appended into this Word document. Please do not just refer to the assessment plan; the report should serve as a stand-alone document. Thank you.