The Brody P.A.S.S. Program: Peer Assisted Learning Promoting Medical Student Success

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Introduction

- East Carolina University's Brody School of Medicine P.A.S.S. (Peer Assisted Study Sessions) Program was piloted in the spring of 2014 to help first year medical students improve academic performance, reduce performance anxiety, and increase access to peer-led small group study sessions. Success of the program has initially been measured by improved student exam grades and end-of-semester evaluation survey.
- It has been noted in the literature that peer teaching is often practiced at medical schools, but not often reported in journal articles or research studies[1].
- Brody P.A.S.S. does not identify high risk students, but rather targets the most difficult courses in the first two years of medical school.
- Participating in Brody P.A.S.S. helps students master course material while simultaneously preparing them for their role as "physician educators" in residency training and in medical practice.

Materials and Methods

The Office of Student Development and Academic Counseling has collected quantifiable data for comparing course exam averages of comparable students who did and did not participate in Brody P.A.S.S. OSDAC also compiled end of the year survey responses from students participating in Brody PASS. The class mean and participating student exam grades for the courses with Brody P.A.S.S. were evaluated.

RESULTS

Course	Exam 1 Score Gap	Exam 4 Score Gap
Anatomy	8.92	4.46
Biochemistry	9.7	4.9
Microbiology	9.7	6.76
Physiology	6.84	2.19
Neuroscience	9.61	1.36
Pharmacology	8.26	3.24

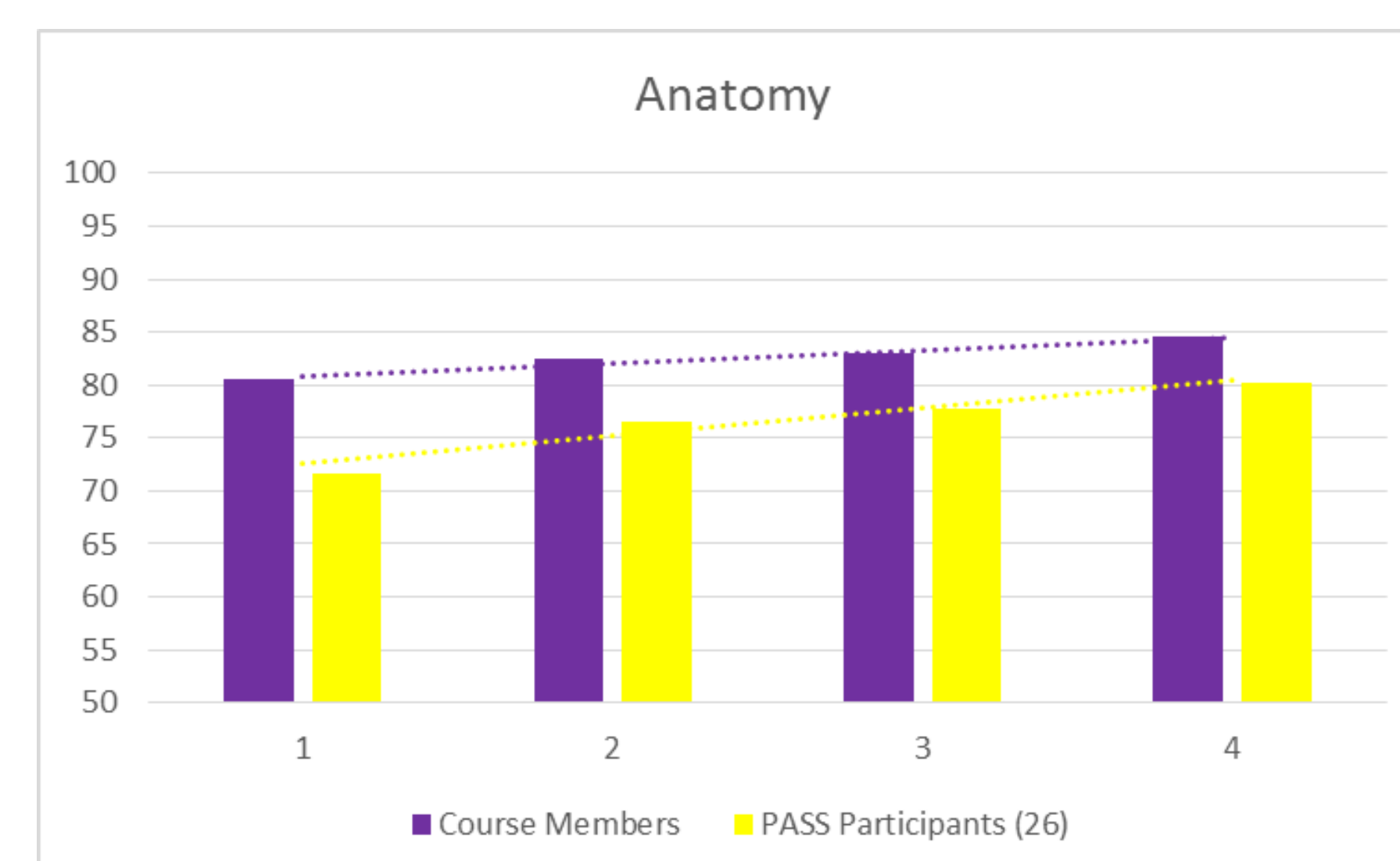Table 1. Score gap between P.A.S.S. participants and the class average from exam 1 to exam 4

Figure 1a. Anatomy test averages
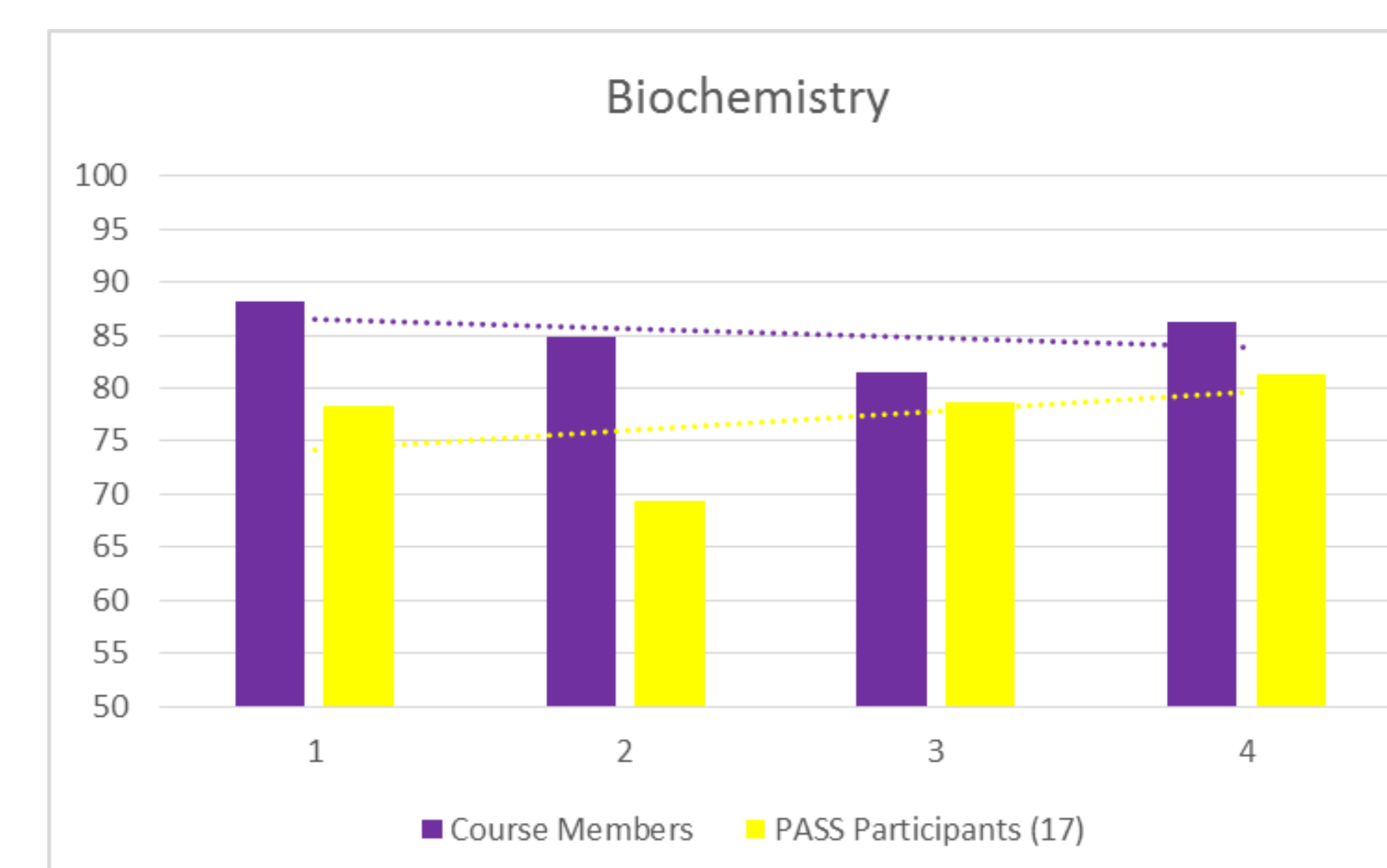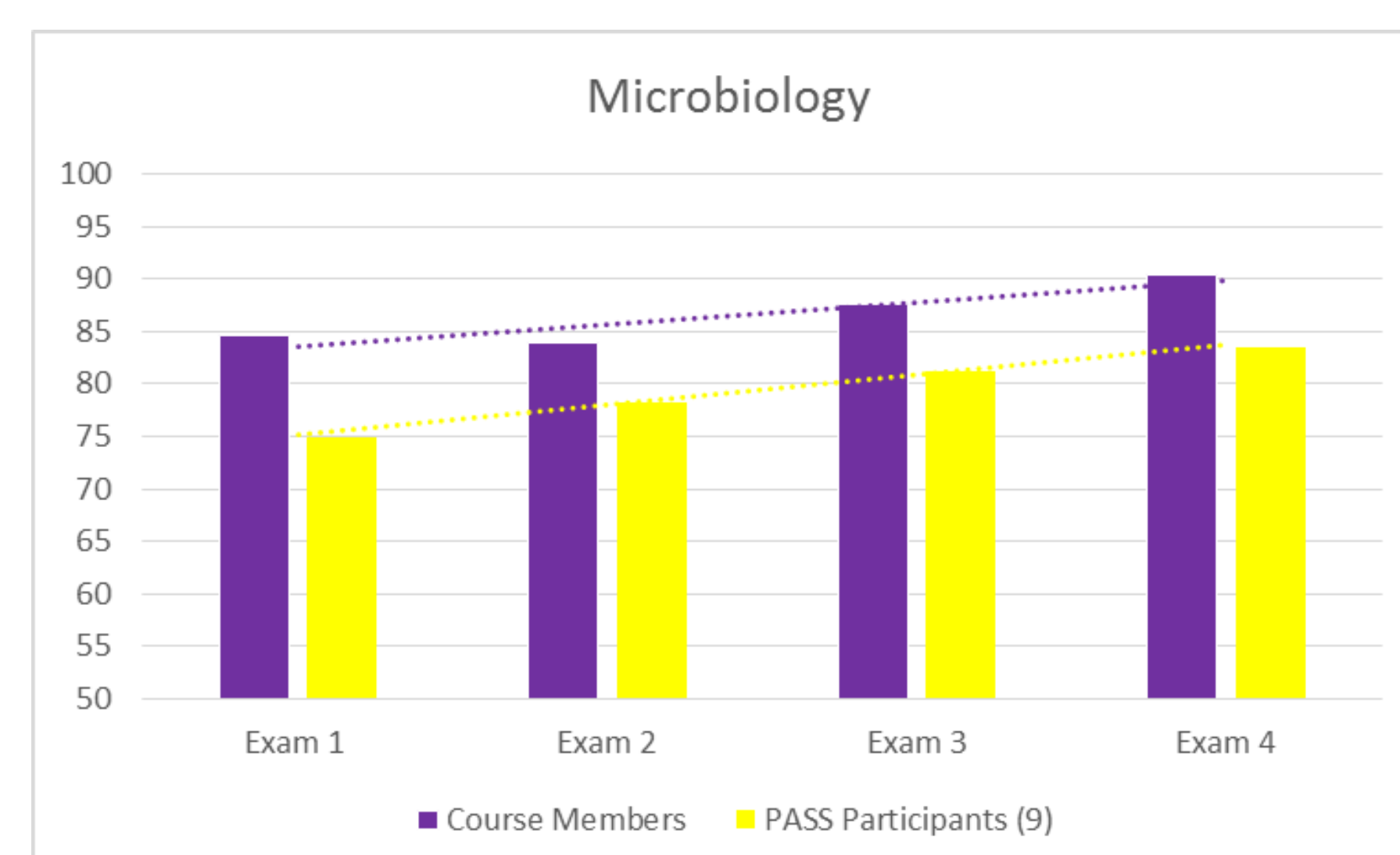

Figure1b. Biochemistry test averages

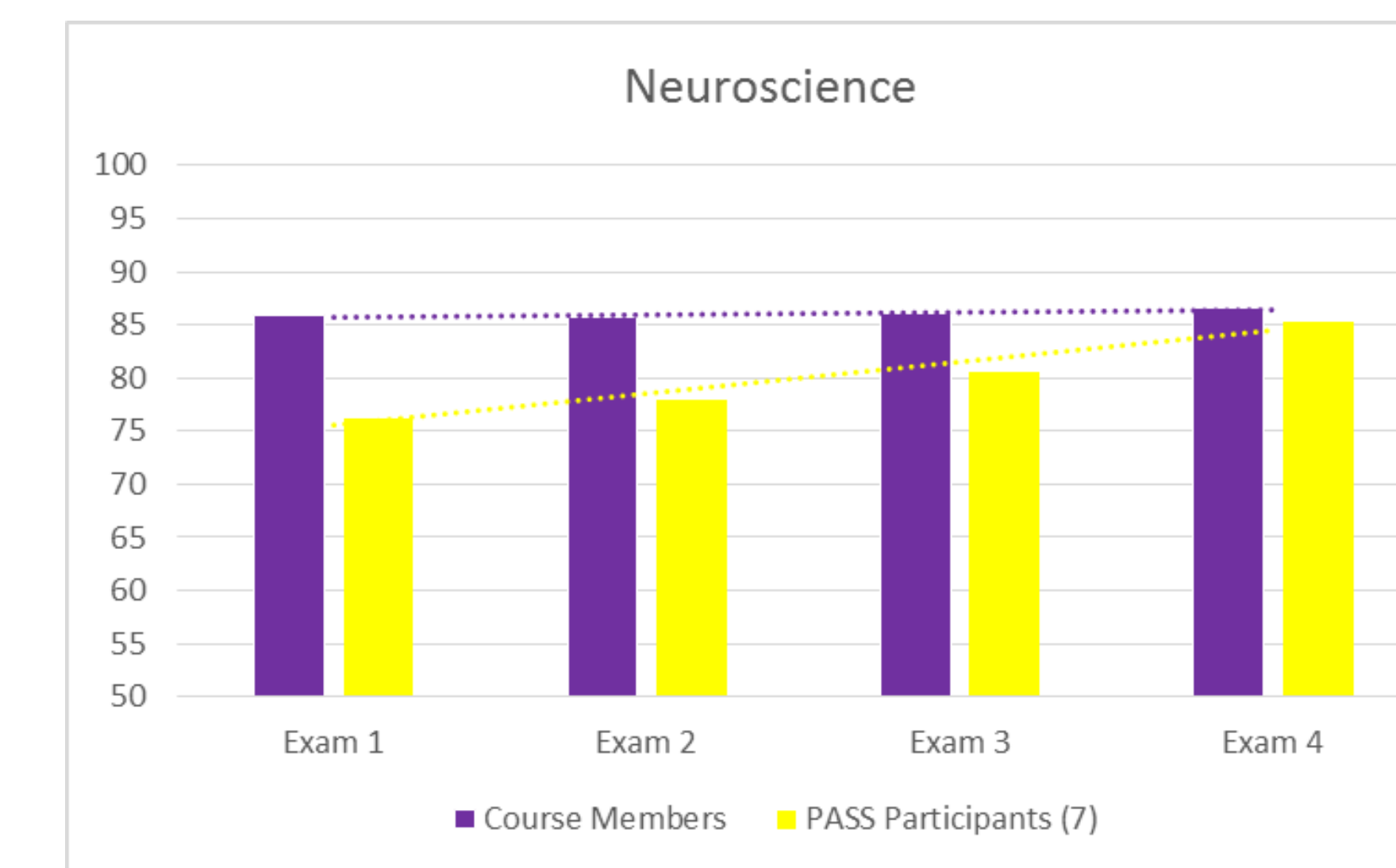Figure 1c. Microbiology test averages

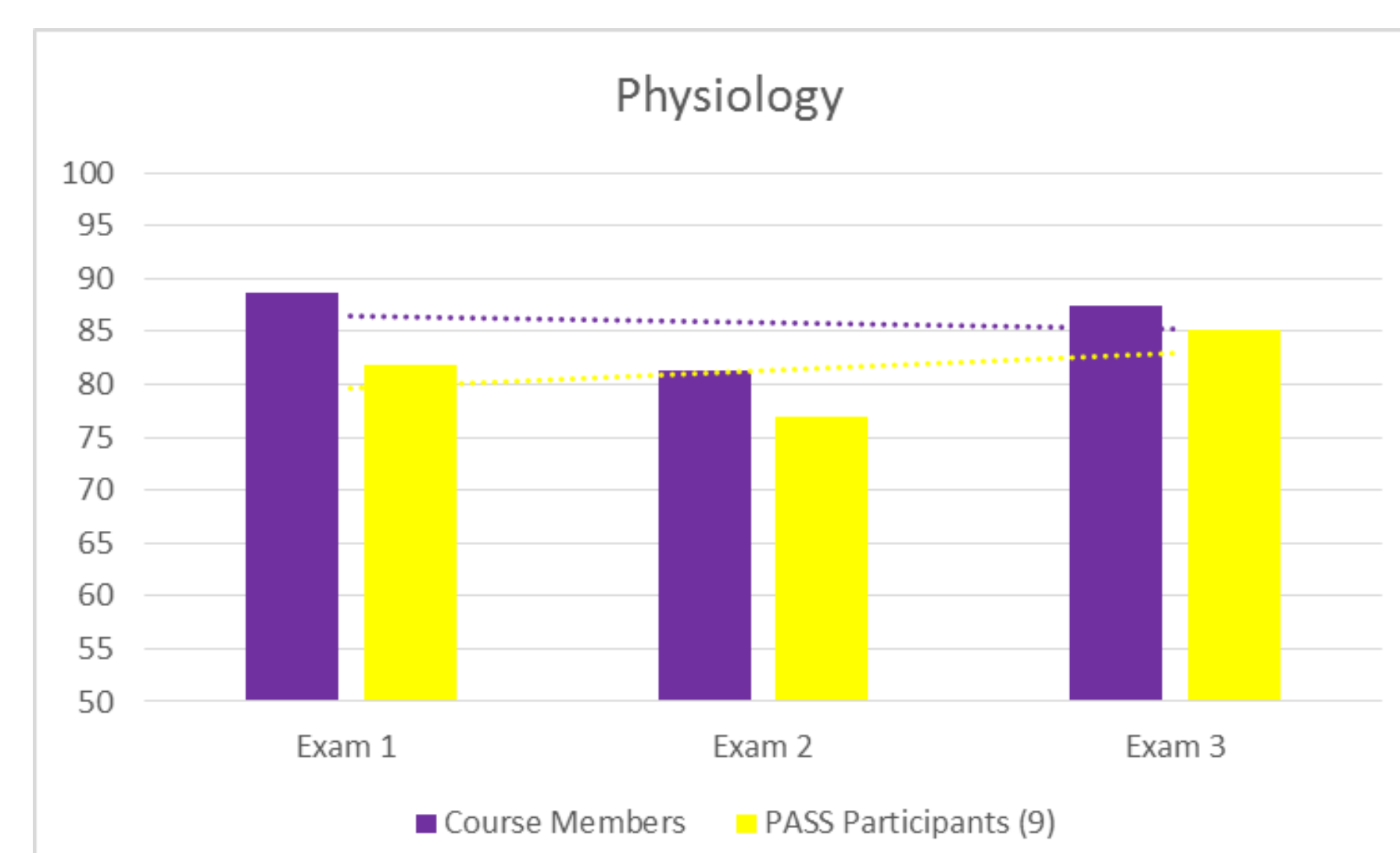Figure 1d. Neuroscience test averages
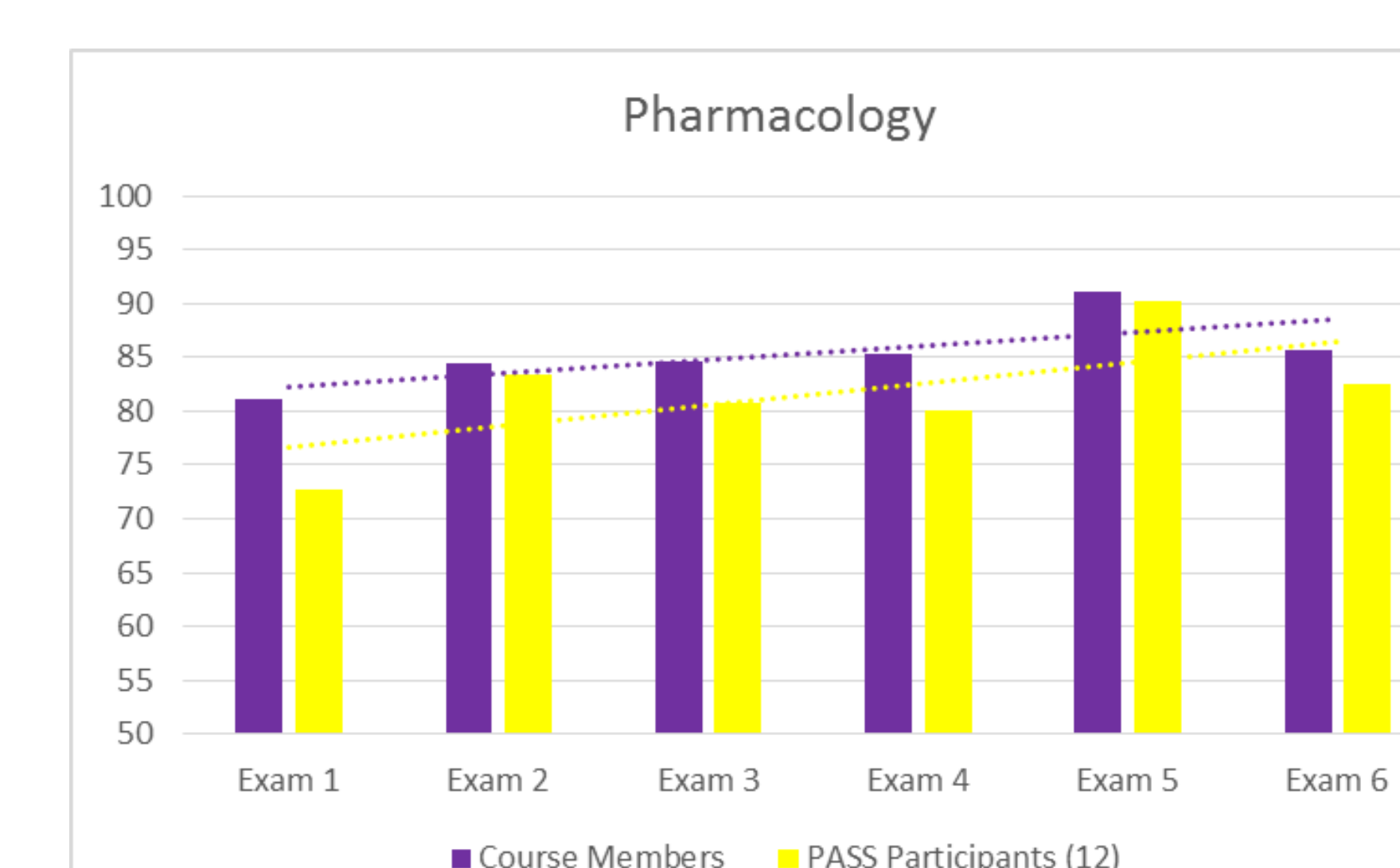

Figure 1e. Microbiology test averages

Figure 1f. Pharmacology test averages

DISCUSSION

- Since starting Brody P.A.S.S. in the spring of 2014, 78 students have participated in the program.
- Only 1 participant who attended over 50% of P.A.S.S. sessions received a failing grade in their course.
- The program has been successful in improving academic performance, reducing performance anxiety, and increasing access to peer-led small group study sessions.
- The exam score gap between P.A.S.S. participants and the class average narrowed in all courses participating in P.A.S.S (Table 1).
- Neuroscience saw the largest reduction in exam gaps with an exam 1 gap of 9.61 points and an exam 4 gap of 1.36 points (Table 1.).
- Students participating in P.A.S.S. increased their scores at a faster rate than the class average resulting in a narrowing of the achievement gap (Figures 1a.-1f.).
- P.A.S.S. has led to the creation of AIM Higher, a peer-to-peer review course for USMLE Step 1.
- ECU's School of Dental Medicine plans to use the Brody P.A.S.S. model to create a peer-to-peer review course for the dental board exams.

Comments from P.A.S.S. participants:
"The fact that it is student led is a major point. Sometimes professors are so knowledgeable about a subject that it is often confusing to a student who is seeing certain material for the first time. Thus, having a peer-facilitator explaining it to his/her peers not only helps the facilitator by solidifying the concepts, but also the participant by allowing him/her to gain an understanding of the material"

REFERENCES

[1] Medical students-as-teachers: a systematic review of peer-assisted teaching during medical school. Hill, Andrew; Yu; Wilson; Hawken; Singh; Lemanu. Advances in Medical Education and Practice. 2011 June; 157-172.

ACKNOWLEDGEMENTS