



UGSC discussion item

From Michael Pelsmajer <pelsmajer@iit.edu>
Date Mon 20-Jan-25 4:06 PM
To Kathiravan Krishnamurthy <KKrishn2@iit.edu>
Cc Fred Weening <fweening@iit.edu>; Kiah Ong <kong2@iit.edu>

Dear Kathir,

Our UGSC rep, Fred Weening, told me to write to you directly about putting a discussion item on the UGSC agenda.

We have been having email discussions with Kevin Cassel and Academic Affairs about an inconsistency in the way that Math Placement into MATH 151 has been implemented, stated in the bulletin, and intended. He said that the best way forward was to bring this up as a discussion item in UGSC, with an eye to a future proposal for policy change. I'll describe the issue for you.

Illinois Tech's math placement process is intended to assess whether students are ready for MATH 151 (Calculus I), and if not, to help them get themselves ready to take MATH 151.

Many incoming students do not need this math placement: There are students with transfer or AP credit who skip to a later course. There are some majors like architecture who do not usually take MATH 151. However, most majors at Illinois Tech require MATH 151 and a "typical student" is expected to take it in their first semester of a four-year schedule.

Incoming students take the ALEKS Math Placement assessment to see if they are ready to take MATH 151. Each student is allowed five total attempts to pass the assessment, and the package includes a clever self-tutoring system that can allow a student to refresh their memory and fill gaps in the knowledge, so some students are able to help themselves get to a level where they can pass the assessment and qualify for MATH 151.

Alternatively, students who score lower on the assessment will be advised to take MATH 147 or MATH 148. These courses exist for the exclusive purpose of getting students prepared to be able to take (and be successful in) MATH 151. Getting a "C" or better in MATH 148 is another way that a student can demonstrate that they are likely ready to take MATH 151.

In summary, we have two alternative ways for a student to show that they are ready for MATH 151: a high score on the ALEKS Math Placement Assessment, or a "C" or better in MATH 148.

Occasionally a student signs up for MATH 148 and then later retakes and gets a high score on the ALEKS Math Placement Assessment - high enough to show that they are ready to take MATH 151. The question is: Should we hold that student back and prevent them from taking MATH 151 if they underperform in MATH 148?

I think that when you consider what I just have laid out, the answer is clearly "no".

For example, if a student takes MATH 148, learns the material well, but fails the MATH 148 exams for whatever reason and gets a bad grade in MATH 148, yet is able to show that they've learned the material in another way - by retaking the ALEKS placement and getting a high score - then the bottom line is that they learned and they demonstrated that they learned. Our goal with this whole process is to get students ready to take and succeed in MATH 151. It shouldn't matter how they learned, only that they learned, and that they can demonstrate that they learned.

(More generally, recent teaching philosophy often advocates giving students multiple opportunities to succeed, which is exactly what we are doing here.)

So, what's the problem? One, what's written in the bulletin (catalog) does not match what I've just described. I'm not sure how that happened; I was the one who put this procedure in place a few years ago, and I don't remember how or whether the bulletin was updated at the time.

Two, Academic Affairs has some concerns. (I'd summarize for you, but I don't think I'm the right person to do that... or I could quote from their emails, but that feels inappropriate, too.) In any event, I'm given to understand that this is best discussed during a UGSC meeting, during which I can try to address everyone's thoughts and concerns.

Please let me know how to proceed from here. Thank you.

Best wishes,
Michael Pelsmajer