We are requesting an extension of the ICourse pilot for the AY 2022/2023

Proposal for a Pilot I-Course Project
Submitted by Bo Rodda to the UGSC – 04/19/2022

The IPRO Program requests support from the IIT Undergraduate Studies Committee (UGSC) to recommend to the University Faculty Council (UFC) that a pilot project be continued for testing the I-Course concept, which is currently under discussion in the UGSC and UFC IPRO committee. This pilot project would be continued and completed within the F2021-S2023 semesters. We will continue to solicit proposals for the F2022 and SP2023 semesters.

In this pilot project, up to 3 credits of Core Curriculum IPRO requirements may be satisfied by I-Courses, which may also satisfy program major requirements. Students who use I-Courses for this purpose may need to take additional free electives courses in order to satisfy the total credit hour requirement of the Core Curriculum. The total credit hour requirement of the Core Curriculum remains unchanged. In this pilot project, ICourses may not be used to satisfy any Core Curriculum requirement other than IPRO.
To initiate an I-Course, degree programs or academic units will submit an I-Course proposal to the UFC IPRO Committee. This committee will assess, prior to offering, all proposed I-Courses for content that satisfies the Core Curriculum requirements for IPRO, as established by the UFC IPRO Committee. At the completion of each I-Course, the UFC IPRO Committee will evaluate the extent to which each actual I- Course met the delivery of content, as described in the corresponding I-Course proposal.

A final pilot project report shall be submitted to the UFC and the UGSC no later than 30 days after the start of the S2023 semester. Decisions to extend or cancel the pilot project are at the discretion of the UFC, based upon recommendations from the UGSC.

We are requesting an extension of the ICourse pilot for the AY 2022/2023

Complications of pandemic

Most of the ICourse Pilot has been run during the Pandemic (4 of 7 semesters, 6 of 8 courses). With the change in teaching modes and numerous other external issues we do not feel the last three semesters (including summer) have been a reliable means to assess the validity of the concept.

Evidence of success

What data we do have suggests that ICourses are the same or better at 3 of 4 of the IPRO LO. The area of deficiency, multidisciplinary experience, had varied scores. For some ICourses it was rated higher compared to IPRO, and some lower.
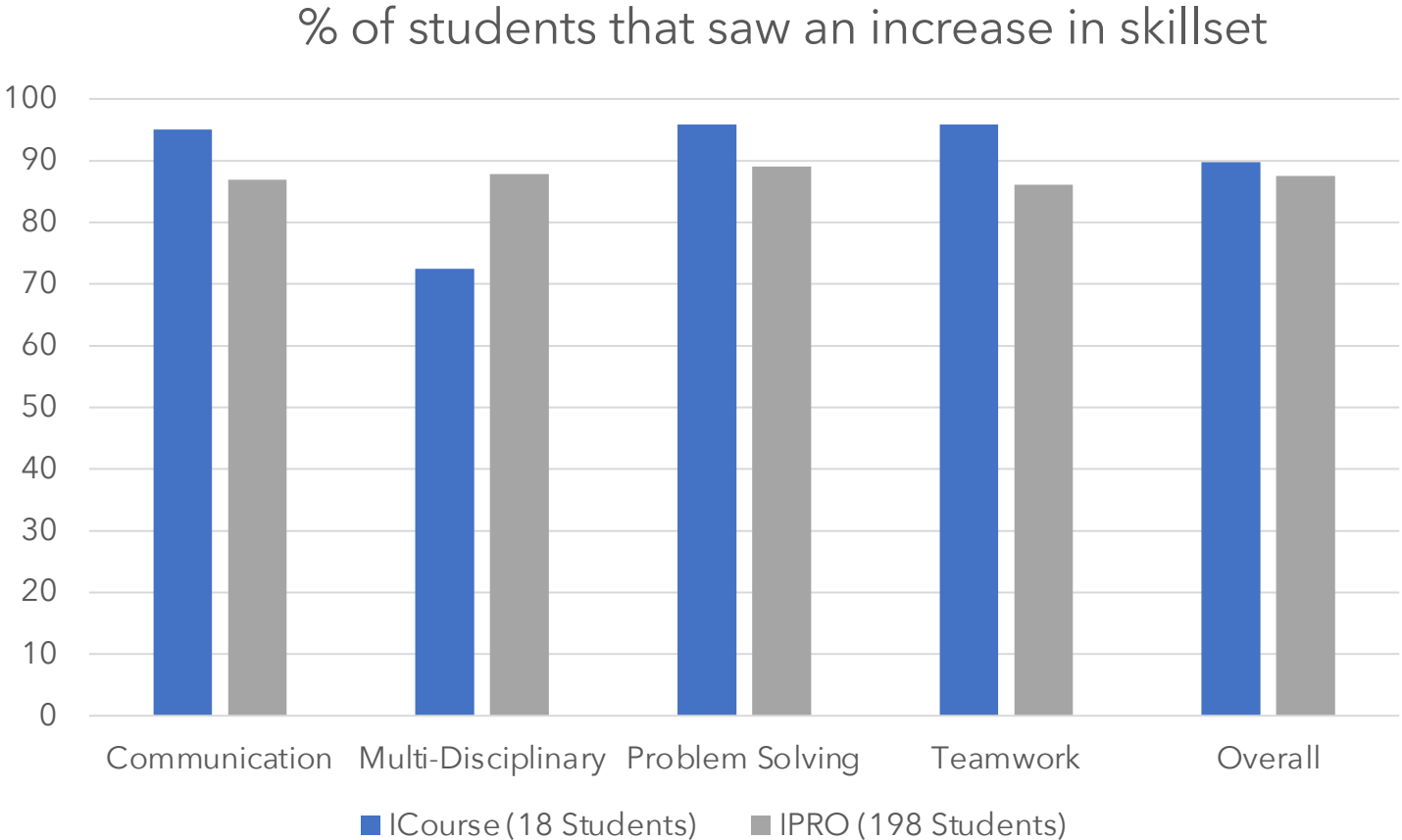
Elevated leadership

Kaplan now has an academic director (IPRO falls under his aegis), as well as an executive director, with more direct connections to the academic counsel and the provost and have already secured renewed support from the upper administration.

Participating Faculty Support

All participating faculty in the pilot see merit in the program and also agree that a one year extension would be prudent to develop the data necessary to fully evaluate the program prior to any decision is made towards its permanent adoption by the UFC.

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Data suggests that ICourses are satisfying IPRO LO and creating positive student outcomes

% of students that saw an increase in skillset

Communication | Multi-Disciplinary | Problem Solving | Teamwork | Overall

■ ICourse (18 Students)   ■ IPRO (198 Students)

Data collected as of Spring 2021

"The knowledge I've gained has been applied to different areas of my life. This is a gift to because I am able to put the things I learn to good use."

"ICourses are really great, I am learning much more about project-based work in my discipline than I would with a standard IPRO."

"This is a really good opportunity to work on real-world problems."

"This should be an ongoing course for anyone enrolled at IIT."

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We still believe that multi-disciplinary experience is a learning objective that needs the most development in IPRO

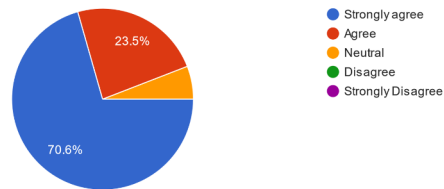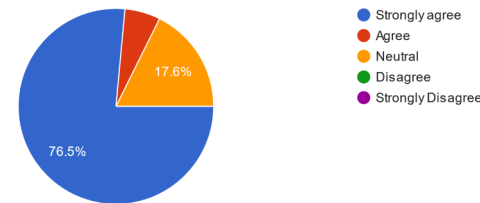|	Communication	Multi-Disciplinary	Problem Solving	Teamwork	Overall
CAE 470 (6 Students)	100%	50%	83.34%	83.33%	79.17%
ARCH 407-05 (5 Students)	80%	40%	100%	100%	80%
MATH 497 (4 Students)	100%	100%	100%	100%	100%
BUS 467-01 (3 Students)	100%	100%	100%	100%	100%

Math 497 by the Numbers

Likert-scale questions on whether IPRO Learning Objectives were met within Math 497

Professor Robert Ellis has developed a rubric we intend to use to evaluate Spring 2022 and Fall 2022 iCourses to normalize course responses in our data collection and evaluation efforts for the pilot. Sample results from his Fall 2021 Math 497 iCourse presented below.
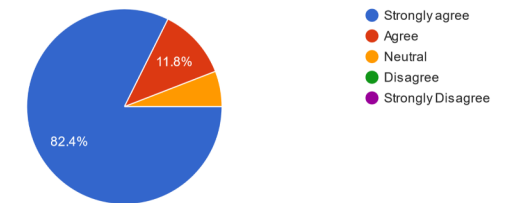
In Math 497 I learned how to better effectively *communicate* the technical and nontechnical aspects of my project to key stakeholders.
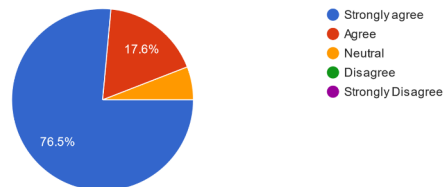17 responses

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

Math 497 contributed to my professional development.
17 responses

- Strongly agree
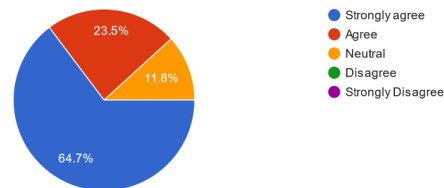- Agree
- Neutral
- Disagree
- Strongly Disagree

In Math 497 I learned how to better be an effective member of an *interdisciplinary team*, using expertise from my major and working on topics broader than any one major.
17 responses

- Strongly agree
- Agree
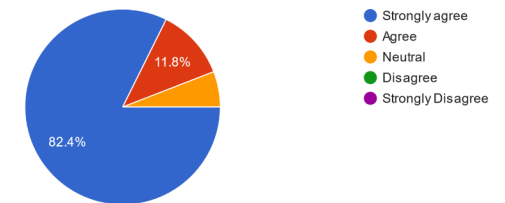- Neutral
- Disagree
- Strongly Disagree

In Math 497 I learned how to better use *project management*, delivering a desired, planned outcome when faced with time and resource constraints.
17 responses

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

In Math 497 I learned how to better act ethically when conducting research, working in teams, and creating solutions.
17 responses

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

In Math 497 I learned how to better use *problem-solving skills*, generating a hypothesis and/or using design methods, and proving or disproving th... and/or using prototyping and analytical thinking.
17 responses

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
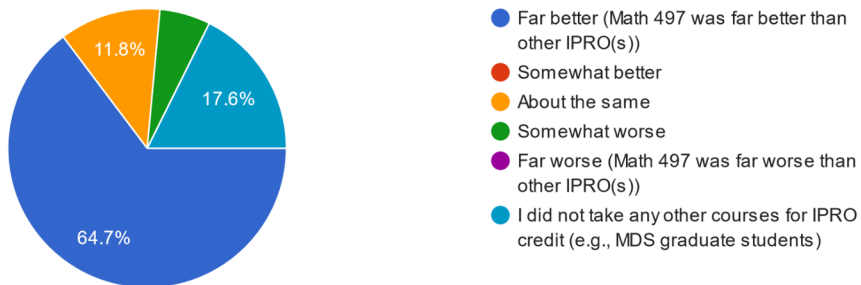
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Math 497 by the Numbers (cont.)

Likert-scale questions on the value of Math 497 compared
to IPROs and other coursework

How was your overall Math 497 experience compared to your other IPRO course(s)?

17 responses

- Far better (Math 497 was far better than other IPRO(s))
- Somewhat better
- About the same
- Somewhat worse
- Far worse (Math 497 was far worse than other IPRO(s))
- I did not take any other courses for IPRO credit (e.g., MDS graduate students)

Compared to your *entire Illinois Tech coursework*, how valuable was Math 497 to your academic experience?

17 responses

- Far above average (Math 497 in top 20%)
- Above average (next 20%)
- Average (middle 20%)
- Below average (second-lowest 20%)
- Far below average (Math 497 in bottom 20%)