

global PBL on Mathematical Sciences (ITS, Online)

Date	Place	Partner Organization	Students' Major and Grade	Participants' Information	SIT Instructor
November7 ~November28,2020	Japan	Institut Teknologi Sepuluh Nopember	Department of Mathematical Sciences • Undergraduate 1st grade • Undergraduate 2nd grade • Undergraduate 3rd grade • Undergraduate 4th grade	(SIT) Students 14, TA 3, Professor 2 (Institut Teknologi Sepuluh Nopember) Students 30, TA 10, Professor 2, Staff 1	FUKUDA Akiko (Department of Mathematical Sciences) NAKATSU Tomonori (Department of Mathematical Sciences)

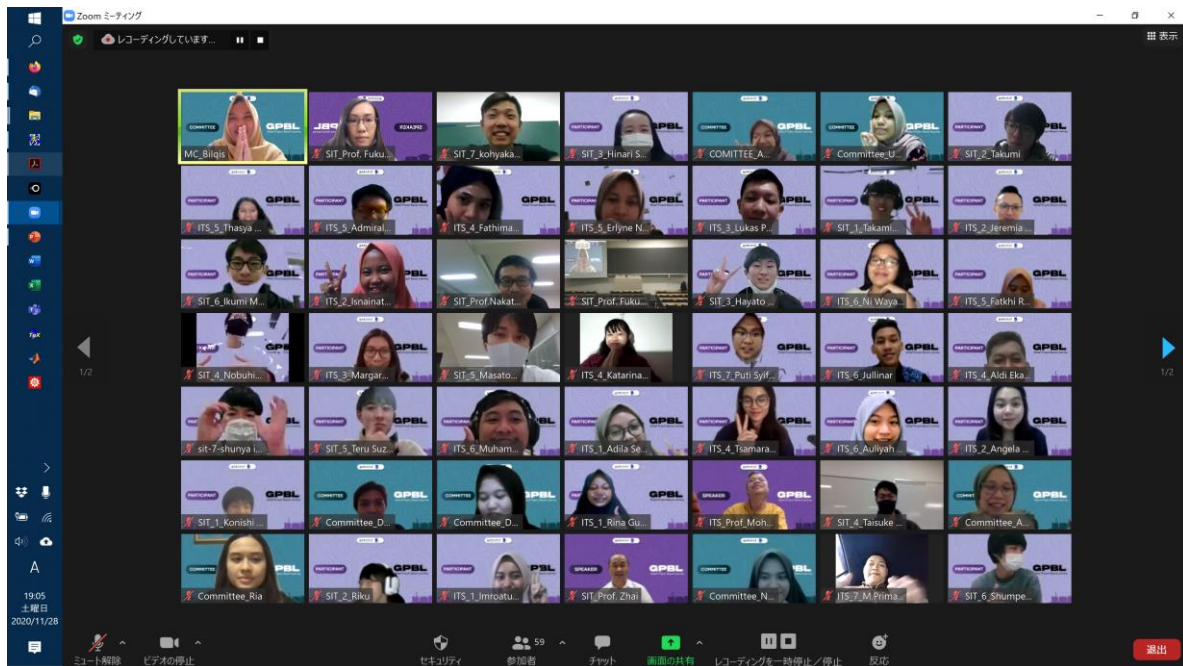


Image1 Group Photo

We carried out the 3rd global PBL(gPBL) between ITS and SIT. Due to the effect of COVID-19, this PBL was held as online PBL with Zoom. We set the theme of this PBL as "Mathematical challenges towards disease outbreaks", because it is a timely theme on recent infection spread of COVID-19 and Mathematics.

At first, Professors Fukuda, Nakatsu and Iqbal gave lectures concerning the theme of gPBL, then each group made discussions for the final presentation including the theme of group, data collection and analysis. In the final presentation, some interesting presentations were given by the students. For example, Analyzing and forecasting COVID-19 using machine learning, COVID-19 detection from lung's X-ray. Except for the group work, some interesting activities such as online game and quiz, Indonesian traditional dance and music, were managed by ITS staff. Every student recognized the power of mathematics and learned Indonesian cultures.

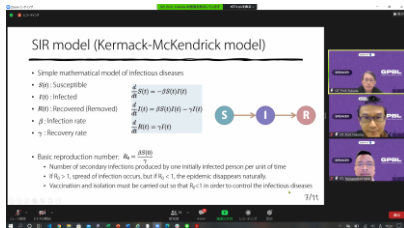


Image2 Lecture (Fukuda)

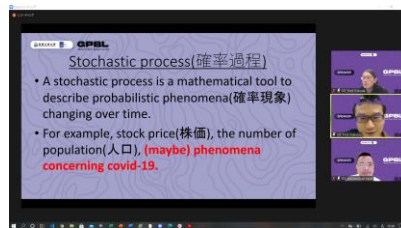


Image3 Lecture (Nakatsu)

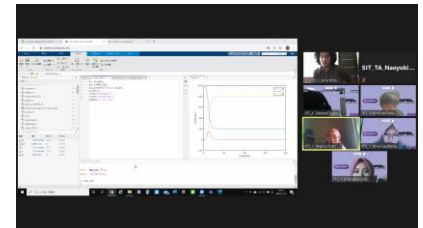


Image4 Groupwork

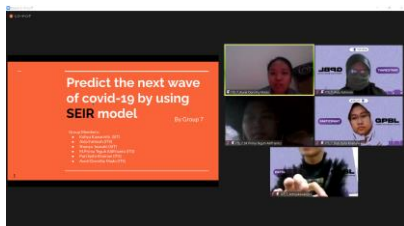


Image5 Final Presentation 1



Image6 Final Presentation 2



Image7 Indonesian Dnace