Year 2020 Spring Semester Flipped Learning Guide for Students 2021.1. Sungkyunkwan University Division of Academic Affairs

### What is Flipped Learning?

- Class which flips method and space of Lecture (acquiring) and Activities (application)
- Lectures (Pre-Class) should be provided to students in advance. Then, student-centered
  activities such as discussions, presentations, seminars, etc. should be conducted during the
  class and manage learning after class (Post-Class)

## Flipped Learning Class Model

[Class Model: Example of a 3-Credit Course]

	Pre-Class			
i-Campus				
	Upload Lecture Guides Upload Learning Materials Upload/Present Related Contents <u>** ex: 2020 lecture contents</u>			

In-Class

Online Streaming and Offline Class

\*\*Centered around student
discussions and presentations during
class time
• 3 (Offline)

+ or
• 3 (Online Streaming)
or
• 1.5 (Online Streaming)+1.5 (Offline)
or
• 1 (Online Streaming)+2 (Offline)
or
• 2 (Online Streaming)+1 (Offline)

Post-Class
i-Campus

Assignments/Quiz
zes
Q&A
Additional
Supplementary
Materials

- Students must study lecture contents & related materials before class and join class prepared
- Absolute grading applied to grade evaluations
- \*\* However, First-year required courses for major admission are excluded (Sungkyun Classics Book Club, Creative and Interdisciplinary Design, English Writing, English Presentation, etc.)
- Professors may Flexibly manage class weeks for presentations and discussions
- Regular class hours can be reduced
  - ※ 2/3 in-class lectures, 1/3 pre-class and post-class materials

# Expected Outcomes

✓ Enable Professor-Student Interaction

Limitations of current lectureoriented teaching methods Insufficient interaction between professors and students Use entire class to promote interaction between professors and students by conducting intensive discussion after acquiring prior knowledge

Process-Centered Class Implementation

Limitations of result (test) centric learning-Final exam-driven learning and extreme competition Enable collaborative learning atmosphere by applying process-centered classes and absolute evaluations

# How to Verify for Flipped Leaning Classes

✓ Shown as Type of Course "Flipped Learning" or "Flipped Learning + International Language" on Online Timetable

#### Professors/Student Interviews from Flipped Learning Participants



Humanities and Social Sciences Campus Professor A

I uploaded materials and discussion topics before class and conducted online real-time discussions during the class. Usually 3–4<sup>th</sup> grade students take my course and with a small number of students, we could freely conduct discussions and provide feedback. After class, I was asked to submit a brief assignment on the topic discussed in class on i-Campus. I am satisfied about our class but I'm also worried about the lack of student participation is the class were to have more students

I took a Flipped Class in 2018. I was at first unfamiliar with the class method since this was my first class after entering the university. I previewed the lecture videos that the professor uploaded before the class at home and solved the examples. In class, I could ask the professor questions regarding to the examples and I solved advanced problems with my group. Since the class was evaluated on absolute-grading scale, I could participate in class without a sense of competition and I liked how much more I could learn from this class compared to other classes.



Natural Sciences Campus Flipped Class Student B



Natural Sciences
Campus
Professor C

I uploaded lecture videos before class and began each lecture by providing assignment feedback to the students. I added a simple quiz to the video so that the students would watch the lecture video before class. The actual class was conducted both offline and online and assignments were given after class. Our TA graded the assignments through i-Campus and our TA reported specifications to me if needed.

I participated in this semester's online flipped learning class. I read the class materials before class, attended the class, and completed discussion/assignments on i-Campus after class. I could also ask questions about the class through Kakaotalk message. It did feel like a 5-credit class due to the many assignments but in the time of Covid-19, I felt like I actually had met the professor compared to other online classes. Also, I was glad that my effort paid off.



Humanities and Social Sciences Campus Online Student Participant D

#### Flipped Learning Outcomes (Pre Flipped Class, Online Flipped Learning Results)

- √ Higher academic performance compared to non-flipped lectures (same subject)
- ✓ High communication between professors & students and amongst students during Covid-19 Pandemic Conditions
- ✓ Provide high realism and sufficient learning content in online class environment

-Flipped Class Outcome Analysis: Comparison of Academic Achievement by Teaching Method -60 250 226.8 55 218 50.8 52.5 49.6 Flipped Flipped 50 200 non-flipped non-flipped 173.5 45 160.8 40 150 Midterm Final Midterm Final General Chemistry 2 General Physics 1 (9 Class) (27 Class)

From Class Evaluations (5 Points Scale) - 2020 Fall Semester Class Evaluation Results-	Online Flipped Learning	Regular Class (Online)	Total Average
I spent more effort and time on this class than any other courses registered	4.26	4.18	4.18
The means to communicate with the professor was always available	4.61	4.49	4.48
I could concentrate on the class as if I were actually listening to it in the classroom	4.42	4.33	-
Lecture contents & learning materials for this online class were provided sufficiently	4.64	4.55	-