

Table S1. Exercise protocols

1. Asynchronous online class (content-focused class)

	subject	contents
1 weeks	Basic skills and concepts of volleyball	- Introduction to volleyball (history, characteristic, rule)
2 weeks		- Introduction to basic volleyball terms and skills (pass, set, dig, serve, spike)
3 weeks		- Learning skills of attacking, blocking, and defending skill - Watching video (volleyball game)
4 weeks	Basic skills and concepts of basketball	- Introduction to volleyball (history, characteristic, rule)
5 weeks		- Introduction to basic basketball terms and skills (pass, dribble, Lay-up, shot)
6 weeks		- Learning skills of attacking and defending skill - Watching video (basketball game)
7 weeks	Health management	- Healthy lifestyle education - Healthy dietary education - Understanding physical fitness (health-related physical fitness and skill-related physical fitness)
8 weeks		- Tabata training
9 weeks	school safety education	- Water-related safety education - First-Aid education
10 weeks		- Safety accidents in physical education class

2. Synchronous online class (real-time bilateral class)

Weeks 1~10

	Exercise		Position	Reps or time	Rest	Load	RPE
Warm-up (10 min)	Dynamic stretching		Standing	10 min	-	-	6~7
Tabata training (14 min)	Low exercise intensity	Narrow stance squat	Standing	20 sec	1 min	BW	1~2 weeks: 12~14, 3~10 weeks : 15~
		Butt kicker	Standing				
		Toe touches	Supine				
		Lunges	Standing				
		Mountain climbers	prone				
		Jumping jacks	Standing				
		Standing abs twist	Standing				
		Squat to side	Standing				
	Maximum exercise intensity	Walking	Standing	10 sec			8~10
Cool-down (10 min)	Static		Standing & Sitting	10 min	-	-	6

BW: body weight, RPE: rating of perceived exertion