

Syllabus

1st Semester ,2019

Subject Number	Advanced Stem Cell Biology - A655				
Course Type/Course Number	10255		Professor	Jae-Won Shim	
			Major	의생명융합학과(일반대학원)	
Credit/Hours	3				
Prerequisite			Contact	Phone Number	010-6307-0948
Teaching Methods (0)notation	Classroom			E-Mail	shimj@sch.ac.kr
	Campus virtual				

1. Course Description

This course will provide sight of view for stem cells biology as a future regenerative medicine. During this coursework, students are expected to understand principle of stem cell biology through origin / basic nature of stem cells and how stem cells are differentiated to each cell type/organs related with disease. Lecture by instructor and presentation for related paper by students will be repeated for each of topics.

2. Course Purpose

Students are expected to understand principle of stem cell biology through origin / basic nature of stem cells and how stem cells are differentiated to each cell type/organs related with disease.

3. Course Objective

This course will provide sight of view for stem cells biology as a future regenerative medicine.

4. Course Features

Lecture by instructor and presentation for related paper by students will be repeated for each of topics.

5. Course Style

Lecture (0)	Lecture & Practice ()	Practice ()
---------------	------------------------	--------------

6. Assignments

Students will prepare presentation about assigned article and a brief review paper.

7. Grades

Attendance	10 %	Quiz	%	Report	%	Discussion	%		
Test and Evaluation(1st~10th)		%		Etc	%	Total	100 %		
1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
30 %	30 %	30 %	%	%	%	%	%	%	%

8. Note

All class will be proceeded with English.

9. Expectation

Students are expected to understand principle of stem cell biology.

10. Required Text (Recommended Text)

Stem Cells: Scientific Progress and Future Research Directions
 Regenerative Medicine 2006
 Essentials of stem cell biology
 Selected Research Papers

Prerequisite : Advanced Stem Cell Biology

Professor : Jae-Won Shim

■ **Schedule (Weekly learn contents)**

Week	Title	Content	multi-media	Classroom
1	Introduction	Introduction to Course, Overview of the Stem Cells		
2	Early development	Early development of mice and human to understand development process of stem cells		
3	The Railroad – Progress of neuronal differentiation	Model study for Embryonic Stem Cell differentiation strategy		
4	Recent achievements of Stem Cells science	Basic hESC stuff, cell transplantation therapy and applications		
5	Exam	Exam1		