In order to train researchers striving to a new field construction, and putting a cross-disciplinary integrative approach into practice aspiring of the integrative bioscience, lectures aspire for that students acquire a hot approach and technique through the lecture and practical experience-oriented instruction. Young researchers, are active in the front line, instruct the hot research techniques running into molecule to organism, plant and mammalian geneses, and evolutionary biology. This course aims for integrative acquiring through the lecture and practical experience.

■ Schedule
Lecture:
1. Oct. 19 13:00-15:00 (Kensuke KURIHRA)
2. Oct. 26 10:00-12:00 (Koji SATO)
3. Oct. 26 13:30-15:30 (Yusuke MIYANARI)

Practice:
1. Nov. 15 13:30-15:30 (Koji SATO)
2. Nov. 15 15:30-17:30 (Yusuke MIYANARI)
3. Nov. 16 10:00-12:00 (Kensuke KAWADE)
4. Nov. 16 13:30-15:30 (Kensuke KURIHRA)
5. Nov. 16 15:30-17:30 (Susumu UCHIYAMA)

Course Contents
1. Artificial cell created as molecular system (lecture)
2. Cell Instrumentation Technology (lecture)
3. Challenging the mystery of reprogramming (lecture)
4. Design and measurement of the equivalent circuit of cell (practice)
5. Live imaging of ES cells (practice)
6. Primary metabolism in seedling establishment (practice)
7. Preparation and observation of vesicle based artificial cell (practice)
8. Determining molecular weight of a protein supra-molecular complex (practice)

■ Classroom Location
Okazaki, Yamate campus (Remote Lecture: NIG, Hayama)

* Give an actual practice at the Okazaki Inst. Integrative Bioscience as an intensive course in consideration of outstanding students.