

科目名		Subject name	
Literature in Bioscience Research I 【220305】		Literature in Bioscience Research I 【220305】	
科目区分 (Course type)	単位数 (Credits)	選択・必修 (Elective/Compulsory)	授業形態 (Course format)
International Course (International Course)	1	必修 (Compulsory)	演習 (Practice)
開講時期 (Course start)		講義室 (Room)	
1年次		L12会議室 (L12 Meeting Room)	

### 1. 科目の概要 (Course outline)

【担当教員 (Teacher)】	担当教員筆頭者名 (Supervising teacher)
別所他 (Bessho, Akiyama, Kimata)	Bessho (Bessho)
【教育目的/授業科目 (Course objectives)】	
In this class, the students will learn the basic technologies in Gene cloning and DNA analysis and their history of development.	
【指導方針 (Course methodology)】	
Every participant reads the indicated chapter of the textbook prior to the class. The indicated discussion leader(s) illustrate the contents of the chapter, and organize discussion.	

### 2. 授業計画等 (Course plan)

	【テーマ (Topic)】	【内容 (Content)】
1回	Chapter 1 and 2	Importance of Gene Cloning and DNA Analysis, and Vector for Gene Cloning.
2回	Chapter 3 and 4	Purification of DNA from Living Cells, and Manipulation of Purified DNA
3回	Chapter 5 and 6	Introduction of DNA into Living Cells, and Cloning Vectors for E. coli
4回	Chapter 7 and 8	Cloning Vectors for Eukaryotes, and How to Obtain a Clone of a Specific Gene
5回	Chapter 9 and 10	The Polymerase Chain Reaction, and Sequencing Genes and Genomes
6回	Chapter 11 and 12	Studying Gene Expression and Function, and Studying Genomes
7回	Chapter 13 and 14	Production of Protein from Cloned Genes, and Gene Cloning and DNA Analysis in Medicine
8回	Chapter 15 and 16	Gene Cloning and DNA Analysis in Agriculture, and Gene Cloning and DNA Analysis in Forensic Science and Archaeology
9回	予備日(spare date)	
【テキスト (Textbook)】		
T.A. Brown, GENE CLONING & DNA ANALYSIS 7th edition (Wiley-Blackwell) <a href="http://as.wiley.com/WileyCDA/WileyTitle/productCd-1119072565.html">http://as.wiley.com/WileyCDA/WileyTitle/productCd-1119072565.html</a> <a href="https://www.amazon.co.jp/Gene-Cloning-DNA-Analysis-Introduction/dp/1119072565/ref=sr_1_fkmr0_2?ie=UTF8&amp;qid=1491258964&amp;sr=8-2-fkmr0&amp;keywords=Gene+Cloning+and+DNA+Analysis%3A+An+Introduction+7th+Edition">https://www.amazon.co.jp/Gene-Cloning-DNA-Analysis-Introduction/dp/1119072565/ref=sr_1_fkmr0_2?ie=UTF8&amp;qid=1491258964&amp;sr=8-2-fkmr0&amp;keywords=Gene+Cloning+and+DNA+Analysis%3A+An+Introduction+7th+Edition</a>		
【参考書 (Reference book)】		

### 3. その他 (Other information)

【履修条件 (Eligibility for this course)】
Students are required to attend a minimum of 2/3 of classes.
【オフィスアワー (Consultation times)】
13:30-15:00 in the day of the class.
【成績評価の方法と基準 (Grades/Evaluation)】
Grading of this course will be decided according to presentation (50%) and the contribution to the discussion (50%).
【関連科目 (Related courses)】
【注意事項 (Important information)】
This will be taught in English.