細胞生物学実習I

Cell Biology Lab I

担当教員 Instructors

教授: 高垣裕子 准教授: 講師: 助教**: 谷口紀江

Associate Professor:

Professor: Lecturer:

Assistant Professor:

Yuko Mikuni-Takagaki

Motoe Taniguchi

授業区分/単位数 Course category/Credits

コア科目 授業区分/単位数 4単位 Course category/Credits Core credits

開講学期/週当時間 (コマ) 数 Semester

前期/週8時間(4コマ)

First semester/8 lecture hours per week

This course meets once a week (8-hour session). There will be a total of about 15 sessions. Students may acquire credits in a more flexible time schedule.

目標 Objectives

細胞生物学一般の実験的解析技術を習得する.

Acquire lab skills for general cell biology.

講義内容 Contents of Course

細胞の構造と機能, 例えば高分子, 代謝, 増殖, 遺伝子およびタンパク質の発現とその調節, 細胞分化, 細胞骨 格の構築、情報伝達について実験的手法を学ぶ.

Lab skills for learning ultrastructure and functions of cells: chemistry of biomacromolecules, cell metabolism, cell division, gene and protein expression and control mechanisms of gene expression, differentiation, cytoskeletal organization, and cell communication will be covered.

参考書 Recommended reference books and/or readings

Biology Laboratory Manual, Eighth Edition, by Vodopich and Moore. WCB McGraw-Hill Companies, Boston, 2008.

Molecular Cloning: A Laboratory Manual, Fourth Edition (3-Volume Set), by Green and Sambrook. CSHL Press, Woodbury, 2012

他に論文や引用文献を実習時に提供する.

Additional papers and references will be supplied in the lab.

成績評価の方法 Grading System

準備状況と実践,25%;レポート,50%;口頭試問,25%.4回以上の欠席は認めない。 Class preparedness and participation, 25%; Written assignments, 50%; Student-teacher conferences, 25%. Students will receive a course grade of zero if they miss 4 labs.

履修に当たっての留意点 Course requirement

特になし

None