

SCID508 Biomolecular Spectroscopy (2024)

Sep 19 – Oct 31, 2024

| | Date | Time | Topic | Lecturer |
|-----------|--|----------------------------------|--|---------------------|
| Th | 19-9-24 Room B301 | 13.00-13.30 13.30-16.00 | -Course orientation -Lecture: Spectrophotometry & Spectrofluorometry | KK |
| Tu | 24-9-24 Room B301 | 13.00-16.00 | - Group discussion: sample preparation and operation of spectrophotometer and spectrofluorometer | KK |
| Th | 26-9-24 Room Pr301, CIF | 13.00-15:00 OR 15.00-17:00 | Lab: Spectrophotometry* | KK & TAs |
| Tu | 1-10-24 Room B301, CIF | 13.00-15:00 OR 15.00-17:00 | Lab: Spectrofluorometry* | KK & TAs |
| Th | 3-10-24 Room B301 | 13:00-14.00 14.00-16.00 | -Lecture: Basic principle of Mass spectrometry -Practice and Discussion: laboratory methods in Mass Spectrometry, using program to analyze biological samples | NP |
| Tu | 8-10-24 | | วันปรัญญา | |
| Th | 10-10-24 Room B301, CIF | 13.00-16.00 | Lab: Mass Spectrometry (GC/MS, LC/MS) Lab discussion: Mass spectroscopy analysis | NP |
| Tu | 15-10-24 Room B301 | 13.00-16.00 | Exam I: spectrophotometry, spectrofluorometry and mass spectrometry | KK & TAs |
| Th | 17-10-24 Room B301 | 13.00-16.00 | -Lecture: Basic principle of protein NMR -Practice/group discussion: interpretation of protein NMR results using virtual NMR machine program | KC |
| Tu | 22-10-24 Computer Room, Chemistry NMR facility | 13.00-16.00 | Lab: Sample preparation, operation of NMR machine Lab discussion: analysis of NMR results | KC & Patoomratana |
| Th | 24-10-24 Room B301 | 13.00-16.00 | Lab: sample preparation for Surface plasmon resonance | SK |
| Tu | 29-10-24 Room B301, CIF | 13.00-16:00 | Lab: Surface plasmon resonance | SK & TAs |

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| Th | 31-10-24 Room B301 | 13.00-16.00 | <i>Exam II: Plasmon resonance spectroscopy & NMR</i> | KK & TAs |
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Course coordinator: Kanlaya Katewongsa kanlaya.pra@mahidol.edu

Lecturers:

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| KK | Kanlaya Katewongsa, D.Phil. | (Biochemistry) |
| NP | Nattawadee Panyain, Ph.D. | (Biochemistry) |
| SK | Sakonwan Kuhaudomlarp, Ph.D. | (Biochemistry) |
| KC | Kiattawee Choowongkomon, Ph.D. | (Kasetsart University) |

*Students will be divided into small groups and each group will be scheduled for different time for the spectrophotometry, and spectrofluorometry