

Schedule for 2310336

PRINCIPLES OF BIOPHYSICAL TECHNIQUES (2 credits)

Second semester (2022)

Time: WE 09.00 - 11.00

Co-ordinator: Kuakarun (kuakarun.k@chula.ac.th)

Room: 521 SCI10

| Topic | Hrs. | Date | Instructor |
|--|------|-----------------|------------|
| Spectroscopy | | | |
| · Photospectroscopy | 2 | 11 Jan 2023 | Tanakarn |
| · Fluorescence spectroscopy | 4 | 18, 25 Jan 2023 | Tanakarn |
| Mass spectrometry and Molecular weight determination | | | |
| · mass spectrometry | 3 | 1, 8 Feb 2023 | Veerarak |
| · electrophoresis, osmosis pressure | 2 | 8, 15 Feb 2023 | Veerarak |
| · equilibrium ultracentrifugation | 3 | 15, 22 Feb 2023 | Veerarak |
| Three-dimensional structure determination of macromolecules | | | |
| · NMR | 2 | 1 Mar 2023 | Kuakarun |
| Mid-term examination 7 - 13 Mar 2023; 13 มี.ค. 2566 เวลา 13:00-16:00 น. | | | |
| Three-dimensional structure determination of macromolecules (cont.) | | | |
| · X-ray diffraction | 3 | 15, 22 Mar 2023 | Kuakarun |
| · cryo-EM | 2 | 29 Mar 2023 | Kuakarun |
| Biocalorimetry | | | |
| · Isothermal titration calorimetry | 2 | 5 Apr 2023 | Kuakarun |
| · differential scanning calorimetry | 2 | 12 Apr 2023 | Kuakarun |
| Presentation/Discussion on 3D structure determination techniques and Biocalorimetry applications | 4 | 19, 26 Apr 2023 | Kuakarun |
| Final examination 8 - 19 May 2023; 9 พ.ค. 2566 เวลา 8:30-11:30 น. | | | |

Quiz, Presentation, Assignment 10%

Exam 90%