

| Schedule for 2310332 (ปี 2, 39 คน) | | | |
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| BIOMOLECULES & INFORMATION PATHWAYS (3 credits) | | | |
| Second semester (2024) | | | |
| Time: WE 10.00 - 11.00 Room: 521 | | Co-ordinator: Napol | |
| FR 9.00 - 11.00 Room: 521 | | | |
| Topic | Hrs. | Date | Instructor |
| 1. Weak forces | 2 | 10-Jan-25 | Thanyada |
| 2. Carbohydrates | 3 | 15, 17 Jan 2025 | Karan |
| 2.1 Monosaccharides and disaccharides 2.2 Polysaccharides 2.3 Glycoconjugates 2.4 Carbohydrate as Information molecules: The sugar code | | | |
| 3. Lipid | 3 | 22, 24 Jan 2025 | Karan |
| 3.1 Storage lipids 3.2 Structural lipids in membranes 3.3 Lipids as signals, cofactors and pigments 3.4 Working with lipids | | | |
| 4. The structure of protein | 3 | 29, 31 Jan 2025 | Alisa |
| 4.2 Secondary structure 4.3 Tertiary and quaternary structure 4.4 Protein denaturation and folding | | | |
| 5. Protein function | 3 | 5, 7 Feb 2025 | Alisa |
| 5.1 Reversible binding of a protein to a ligand 5.2 Complementary interactions between proteins and ligands 5.3 Protein interactions modulated by chemical energy | | | |
| 6. Enzymes | | | |
| 6.1 The basics of enzymes | 0.5 | 14 Feb 2025 (0.5h) | Supitcha |
| 6.2 How enzymes work | 0.5 | 14 Feb 2025 (0.5h) | Supitcha |
| 6.3 Enzyme kinetics as an approach to understanding mechanism | 2 | 14, 19 Feb 2025 | Supitcha |
| 6.4 Examples of enzyme mechanisms | 1 | 21 Feb 2025 | Supitcha |
| 6.5 Regulatory enzymes | 1 | 21 Feb 2025 | Supitcha |
| 6.6 Enzyme applications | 1 | 26 Feb 2025 | Supitcha |
| Mid-term examination: สอบ 3 - 7 Mar 2025; 06-03-2025 08:30 - 11:30 น. | | | |
| 7. Nucleic acids and information pathways | | | |
| 7.1 Nucleic acids | 4 | 12, 14, 19 Mar 2025 | Anchalee |
| 7.2 Gene and chromosomes | | | Anchalee |
| 7.3 DNA metabolism (replication) | 2 | 21 Mar 2025 | Anchalee |

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| 7.4 | RNA metabolism (transcription) | 2 | 26, 28 Mar 2025 | Anchalee |
| 7.5 | Protein metabolism (translation) | 2 | 28 Mar, 2 Apr 2025 | Anchalee |
| 7.6 | Regulation of gene expression | 4 | 4, 9, 11 Apr 2025 | Napol |
| 7.7 | DNA technology | 3 | 11, 18, 23, 25 Apr 2025 | Napol |
| 7.8 | Protein technology | 3 | | Napol |
| Final-term examination: สอบ 28 Apr - 14 May 2025; 30-04-2025 13:00 - 16:00 น. | | | | |