



Course Syllabus

Drug Discovery and Development (0403503)

Course Description:

Introduction to drug discovery and development, drugs from natural and synthetic sources, small-molecule drug discovery and development, new technologies used in process scale, case studies in discovery and development of some current drugs in the market.

Grading:

PART I: Midterm examination (L1-L3)	50%
PART II: Final examination (L8-L10)	40%
PART III: Assignment	10%

*If the total score is equal to or higher than 60.00%, the letter grade of either A, B+ or B will be assigned. If the total score is LOWER than 60.00%, the letter grade of either C+, C, D+, D or F will be assigned.

Course Coordinator: Jaruwan Chatwichien, Ph.D.

Room: Teleconference room, Floor 3rd, CGI

Time: Wednesday and Friday

Date	Topic	Lecturer
Sep. 2, 2020 9:00 – 12:00	L1: Introduction to drug discovery and development	CE
Sep. 9, 2020 13:00 – 16:00	L2: Synthetic drugs I	RS
Sep. 11, 2020 9:00 – 12:00	L3: Synthetic drugs II	WN
Sep. 14, 2020 9:00 – 12:00	L4: Process chemistry L5: Flow chemistry	CT SS
Sep. 16, 2020 9:00 – 12:00	L6: Case study I L7: Case study II	RS WN
Sep. 23, 2020 9:00 – 12:00	Midterm examination (L1 – L3)	Staff
Oct. 16, 2020 9:00 – 12:00	L8: Directing evolution: The next revolution in drug discovery I	JC

Oct. 21, 2020 9:00 – 12:00	L9: Directing evolution: The next revolution in drug discovery II	JC
Oct. 28, 2020 9:00 – 12:00	L10: Mass spectrometry: Analytical tool in drug discovery	WJ
Oct. 30, 2020 9:00 – 12:00	L11: New chemical and synthetic biology tools for labeling and detection of biomolecules	CU
Nov. 4, 2020 13:00 – 16:00	L12: Clinical trial: Case study	DP
Nov. 11, 2020 9:00 – 12:00	Final examination (L8-L10)	Staff

Lecturers:

Chatchakorn Eurtivong, Ph.D. (CE)

Rungroj Saruengkhanphasit, Ph.D. (RS)

Worawat Niwetmarin, Ph.D. (WN)

Satapanawat Sittihan, Ph.D. (SS)

Charnsak Thongsornkleeb, Ph.D. (CT)

Jaruwan Chatwichien, Ph.D. (JC)

Watthanachai Jumpathong, Ph.D. (WJ)

Chayasith Uttamapinant, Ph.D. (CU)

Dumnoensun Pruksakorn, M.D., Ph.D. (DP)