

SCCH 159 General Chemistry Laboratory
SCCH 169 Chemistry Laboratory
SCCT 117 Chemistry Laboratory I
Class Code (Google Classroom): tmswsinv

Students

SCCH 159 ENNM (Science Program in Natural Resources and Environmental Management) = 25
 SCBE (Science Program in Bioresources and Environmental Biology) = 24

SCCH 169 EGBI (Engineering Program in Biomedical Engineering) = 49
 EGCG (Engineering Program in Chemical Engineering) = 20
 EGII (Engineering Program in Industrial Engineering) = 14

SCCT 117 SCCT (Science Program in Chemical Innovation and Technology) = 21

Semester 1 Academic Year 2025

Credit 1 credit (0-3-1: Lecture-Practice-Self study)

Period Friday (1.30 – 4.20 pm)

Place Room **L1-201** (lab brief) and Room **SC4-300** (practical lab)

Instructors Pre-midterm

1. Asst. Prof. Teera Chantarojsiri (TC) (teera.cha@mahidol.edu)*
2. Asst. Prof. Soraya Pornsuwan (SP) (soraya.por@mahidol.edu)

Post-midterm

3. Asst. Prof. Phoonthawee Saetear (PS) (phoonthawee.sae@mahidol.ac.th)*
4. Asst. Prof. Preeyanuch Junkong (PJ) (preeyanuch.jun@mahidol.edu)

***Course coordinator**

Scientist Miss Ornpavee Seoob (ornpavee.seo@mahidol.ac.th)

Teaching Assistant

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|--|-----------------------------------|
| 1. Miss Phakteema Kongsaktrakul (Neen) | phakteema.kog@student.mahidol.edu |
| 2. Mr. Pawares Pornchaiprasa (..) | pawares.pon@student.mahidol.edu |
| 3. Miss Krittaya Salangam (Meena) | krittaya.saa@student.mahidol.edu |
| 4. Mr. Anawin Promkaew (Atom) | anawin.prm@student.mahidol.edu |
| 5. Mr. Supanut Prom-in (Fluke) | supanut.prm@student.mahidol.edu |
| 6. Miss Wipawee Chayman (Khim) | wipawee.chm@student.mahidol.edu |
| 7. Mr. Thana Anusanti (..) | thana.ans@student.mahidol.edu |

Course description

General experimental techniques related to topics in general chemistry; experiments related to qualitative and quantitative analysis.

Course schedule

Friday as scheduled in course outline

1.30 pm Lab brief at room **L1-201**

~2.00 pm Lab quiz at room **SC4-300**

4.20 pm Lab report submission

Weekly TBA if any extension of the lab report submission.

Score deduction for LATE submission of lab report

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|----------------------------|-----------------------------------|
| – In period of 0 to 5 min | → 20 % deduction of points earned |
| – In period of 5 to 10 min | → 50 % deduction of points earned |
| – Late > 10 min | → 0 (zero) point |

Course outline (Year 2025)

Week	Date	Activity	Instructor
-		Log in to COCHEM system for MU LabPass testing (http://mux.mahidol.ac.th) – 15 July to 6 Sep Submit the certificate in the Goggle Classroom	-
1	8 Aug	No class – preparation period <i>i.e.</i> , MU LabPass testing, lab gown, study the lab direction, ...	-
2	15 Aug	Orientation (room L1-201) & Glassware checkout (room SC4-300)	TC, PS, SP, PJ
3	22 Aug	Lab 1 Measurement and Density	TC, SP
4	29 Aug	Lab 2 Determination of Gas Constant	TC, SP
5	5 Sep	Lab 3 Thermochemistry: The Heat of Reaction	TC, SP
6	12 Sep	Lab 4 Rate of Reaction	TC, SP
7	19 Sep	Explanation and Students' Practice for the Practical Lab Exam #1	TC, SP
8	26 Sep	Practical Lab Exam #1 – Determination of Heat of Dissolution	TC, SP
9	29 Sep – 3 Oct	Midterm examination week (No class & No exam for SCCH 159/169/SCCT 117)	-
10	10 Oct	No class – Mahidol University's Graduation Ceremony	-
11	17 Oct	Lab 5 Spectrophotometric Determination of Equilibrium Constant	PJ, PS
12	24 Oct	Lab 6 Spectrophotometric Determination of Salicylic Acid	PJ, PS
13	31 Oct	Lab 7 Titration of Acids and Bases	PJ, PS
14	7 Nov	Lab 8 Redox Titration	PJ, PS
15	14 Nov	Explanation and Students' Practice for the Practical Lab Exam #2	PJ, PS
16	21 Nov	Practical Lab Exam #2 –Determination of Unknown Concentration	PS, PJ
17	28 Nov	Glassware checkout	PS, PJ
18	1 – 12 Dec	Final examination week (No class & No exam for SCCH 159/169/SCCT 117)	-

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Course Evaluation

1) Class attendance (including PPE and Safety)	10 points
2) Quiz (individual)	20 points
3) <u>Group</u> lab report	40 points
4) Practical lab examination (individual)	20 points
5) MU LabPass (certificate and result of “pass”)	10 points
Total	100 points

Letter grading**Remark:**

1. There is **NO** re-exam for SCCH 159 / SCCH 169 / SCCT 117.
2. Students need enrollment in the next academic year.

Score	Grade
≥ 80	A
75–79	B+
70–74	B
65–69	C+
60–64	C
55–59	D+
50–54	D
0–49	F