



## Course Syllabus

### SCGI195: Space Exploration and Astrobiology

#### วทศน195: การสำรวจอวกาศและชีวดาราศาสตร์

**Second Semester: Jan - May, 2023**

**Credit (lecture - lab – self-study): 1(1-0-2)**

**Course Description:** The origin and evolution of life; possibility of evolution on other planet; application of astrobiology; space education in Thailand; fundamental of space exploration; Thai space agency; national space roadmap; technology for space exploration

**Prerequisite:** N/A

**Grade:** A-F

**Day/Location:** Thursday/ 16.30-17.30/ SC1-151/ class code: qe7xdwr

Faculty of Science, Mahidol University Salaya

**Course Objective:** At the completion of the course, students should be able to

1. Gain basic knowledge about astrobiology and space exploration
2. Aware of upcoming space exploration and technology
3. Understand Thai space education history and roadmap
4. Obtain necessary information about Thai space agency and organization



Course schedule:

Date	Topic	Day-Hour	Instructors
		Thursday	
<b>W1</b> 12 Jan	Course introduction	16.30-18.30 onsite	TT
<b>W2</b> 26 Jan	Space Agriculture (Astroculture)	16.30-18.30 onsite	TT
<b>W3</b> 2 Feb	Astrobiology and space biology	16.30-18.30 online	TT
<b>W4</b> 9 Feb	Possibility of life on other planets	16.30-18.30 online	TT
<b>W5</b> 16 Feb	Progress in Thai space education Final report announcement	16.30-18.30 onsite	TT
<b>W6</b> 23 Feb	<b>Quiz</b>	16.30-17.30 onsite	TT
<b>W7-W15</b> 2 Mar-	Individual study for final report	16.30-18.30 online	TT
16 Mar	Special speaker: NARIT	16.30-18.00 online	SA
23 Mar	Special speaker: GISTDA and national space roadmap Final report submission	16.30-18.00 online	SC
<b>Final exam</b>			
<b>Total</b>		<b>15</b>	



**Teaching method:** In-class or online lecture and activities.

**Teaching Media:** PowerPoint presentation, handout, demonstration, group work.

**Attendance:** Students are expected to attend all lectures and activities on time with all assignments completed. Make-up lecture will not be given. If you have to miss a class, let me know ahead of time. 3 absences will result in F.

### Measurement and Evaluation of Students Achievement

- |   |     |
|---|-----|
| 1. In-class participation                 | 20% |
| 2. Discussion and Interactive performance | 20% |
| 3. Examination and assignments            | 50% |

### Course Evaluation

1. Student gain knowledge according to the course objectives.
2. Student participate in class at least 90% of total hours.
3. Grading scale A-F (F = below 50, D = 51-60%, C = 61-70%, B = 71-80%, A = 81-100%)

**Course coordinator:** Dr. Tatpong Tulyananda

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**Office hour:** by appointment