TQF3 Course Specification

Section 1 General Information

1. Course Code and Title

In Thai วิวัฒนาการมนุษย์ ความหลากหลาย และ สุขภาพ

In English Human Evolution, Diversity and Health

2. Number of Credits (4-0-8).

(Theory ... hrs. Self-study ... hrs Practice ... hrs. / week)

3. Curriculum and Course Type

3.1 Program of Study International Bachelor's Degree

3.2 Course Type General Education

3.3 Please Specify Course's Literacy

- ☑ MU Literacy (Core Values, SEP, GE for Human Development)
- ☑ Health Literacy (Health, Sport)
- ☐ Digital Literacy (ICT, Applied Mathematics)
- ☑ Social and Humanity Literacy (Social, Humanity, Law, Ethics, Arts)
- ☑ Communication Literacy (language, Academic Communication)
- ☑ Science and Environmental Literacy (Applied Science for Life, Environmental Responsibility)
- ☐ Finance and Management Literacy (Finance, Management, Entrepreneur)

3.4 Please Specify Relationship between course and corporate culture

- ☐ M - Mastery รู้แจ้ง รู้จริง สมเหตุ สมผล
- ☑ A - Altruism มุ่งผลเพื่อผู้อื่น
- ☑ H - Harmony กลมกลืนกับสรรพสิ่ง
- ☑ I - Integrity มั่นคงยิ่งในคุณธรรม
- ☐ D - Determination แน่วแน่ทำ กล้าตัดสินใจ
- ☐ O - Originality สร้างสรรค์สิ่งใหม่
- ☑ L - Leadership ใฝ่ใจเป็นผู้นำ

4. Course Coordinator and Instructor

4.1 Course Coordinator Ramesh Boonratana – Science Division – 0898515700 & ramesh.boo@mahidol.ac.th

(Name – Department – Contact: phone no. and e-mail address)

4.2 Instructor Ramesh Boonratana

Ditthayanan Punyaratabandhu

5. Trimester/Class Level

5.1 Trimester All trimesters (including summer session) / for all students in all Undergraduate Programs

5.2 Number of Students Allowed Approximately 30 Students

6. Pre-requisite

.....none.....

7. Co-requisites

.....none.....

Section 2 Aims and Objectives

1. Course Goals

Human Evolution, Diversity and Health create learners' knowledge, awareness and understanding of the human body through the study of the origin of the human species. The course develops the learners' comprehension and appreciation of human distinctiveness and the diversity within the Order Primates. The course further allows learners to create knowledge and understanding of the scientific advancements that are stretching the limits of human ability and changing modern society.

Course Goals: From the overview perspective of the course instructor, based on the principles, knowledge and skills related to the Program, describe the learning skill the students can develop and apply for further study or work in the future according to the goals set by the instructor in-charge. This has to correspond to MU-GE Module LOs to equip the students with MU-Graduate Attributes.

2. Objectives of Course Development/Revision

2.1 Course Objectives

2.1.1. Understand evolutionary theory, identify characteristics of Primates and Hominids, and identify key stages in the evolution of human society

2.1.2. Use scientific understanding to debunk common myths and misperceptions about humans, and analyze the impact of scientific advancement on humans and society

2.1.3. Apply key concepts to explain and analyze connections between past development and current situations, and predict future trends.

Course Objectives: Describe in detail the knowledge, understanding, skills and abilities of students after the course learning achievement, from the perspective of the course instructor in-charge. The objectives can be written based on the domains of learning (cognitive, affective, psychomotor, etc.)

2.2 Course-level Learning Outcomes (CLOs)

By the end of the course, students are able to

1. CLO1 Explain evolutionary theory and identify real-world examples of evolution, identify and explain characteristics of Primates and Hominids, and identify key stages in the evolution of human society
2. CLO2 Use scientific understanding to debunk common myths and misperceptions about humans, and analyze the impact of scientific advancement on humans and society
3. CLO3 Apply key concepts to explain and analyze connections between past development and current situations, and predict future trends
4. CLO4 Work effectively in groups with members from diverse backgrounds and field of studies
5. CLO5 Use technology to enhance their learning experience.

Remarks:

A. "The course-level expected learning outcomes (CLOs)": Based on the course objectives, explain the knowledge, abilities and skills of students that can be measured and evaluated to make sure that the students get the learning experience, pass the course evaluation based on criteria defined, and achieve the objectives in section 2.1 and the performance based on the standards defined.

B. A good CLO should consist of 3 structural components:
   1. AN ACTION VERB: Identify the ability or skill that the students must perform to be observed or measured.
   2. LEARNING CONTENT: Identify the knowledge that the students will gain and apply for other courses in the program or for future work.
   3. CRITERIA OR STANDARD: Identify the criteria or standards of competency defined in the course to judge the students' achievement.

C. In a CLO, more than one learning domain can be included.

D. Each course should have about 4 – 8 CLOs.

Section 3 Course Description and Implementation

1. Course Description

(In Thai)..... Course Goals should be reflected. .....
.....

(In English) changing modern society; human ability; human body; human distinctiveness; human diversity; human evolution; human health; human origins; primate diversity; scientific advancements

2. Number of Hours Per Trimester

Theory (hours)	Practice (hours)	Self-study (hours)
48	0	96

3. Number of Hours per Week for Individual Advice

4 hours per week at 1 hour per day available at fixed schedule, and if required, students may schedule an appointment with the lecturer or walk in during office hours.

Identify the following information: The process or method that the person in-charge uses and time allocated for individual students.

Section 4: Development of the expected learning outcomes

1. A brief summary of the knowledge or skills expected to develop in students; the course-level expected learning outcomes (CLOs)

   By the end of the course, students who successfully complete the course will be able to:

   1. CLO1 Explain evolutionary theory and identify real-world examples of evolution, identify and explain characteristics of Primates and Hominids, and identify key stages in the evolution of human society
   2. CLO2 Use scientific understanding to debunk common myths and misperceptions about humans, and analyze the impact of scientific advancement on humans and society
   3. CLO3 Apply key concepts to explain and analyze connections between past development and current situations, and predict future trends
   4. CLO4 Work effectively in groups with members from diverse backgrounds and field of studies
   5. CLO5 Use technology to enhance their learning experience.

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2. How to organize learning experiences to develop the knowledge or skills stated in number 1 and how to measure the learning outcomes

Course Code	Teaching and learning experience management	Learning outcome measurements
CLO1	Lecture, discussion, e-learning, group work, field trip	Assignments, examinations
CLO2	Lecture, discussion, e-learning, group work, peer teaching	Assignments, presentations, examinations
CLO3	Lecture, discussion, e-learning	Assignments, examinations
CLO4	Discussions, e-learning, group work, peer teaching	Assignments, presentations
CLO5	e-learning	Assignments

Section 5 Lesson Plan and Evaluation

1. Lesson Plan

Week	Topic/Details	Number of hours		Teaching activities/ media	Instructors
		Class-room sessions	Practice ses-sions		
1	Introduction / Overview of studies Basics of evolutionary theory	4	-	Lecture, discussion, and e-learning	Ramesh Boon-ratana
2	Forces of evolution Natural selection	4	-	Lecture, discussion, and e-learning	Ramesh Boon-ratana
3	Heredity, genetics and evolutionary factors	4	-	Lecture, discussion, and e-learning	Ramesh Boon-ratana
4	The Order Primates Primate characteristics	4	-	Lecture, discussion, and e-learning	Ramesh Boon-ratana
5	Social Primates Evolution of Primate social systems	4	-	Lecture, discussion, and e-learning	Ramesh Boon-ratana
6	Early Hominids and bi-pedalism The emergence of modern humans	4	-	Lecture, discussion, and e-learning	Ramesh Boon-ratana
7	Evolution of human so-ciety	4	-	Lecture, discussion, and e-learning	Ramesh Boon-ratana

Week	Topic/Details	Number of hours		Teaching activities/ media	Instructors
	Sexual dimorphism in humans				
8	Evolution of human health Diseases and society	4	-	Lecture, discussion, and e-learning	Dittha-yanan Pu-nyarata-bandhu
9	Race, gender, disability and social stereotypes Genetics, genetic testing and genetic modification	4	-	Lecture, discussion, and e-learning	Dittha-yanan Pu-nyarata-bandhu
10	Biochemistry and health: medicines, vac-cines, hormones, mental illness, performance en-hancers	4	-	Lecture, discussion, and e-learning	Dittha-yanan Pu-nyarata-bandhu
11	Organ transplants, tissue engineering and 3D printing	4	-	Lecture, discussion, and e-learning	Dittha-yanan Pu-nyarata-bandhu
12	Prosthetics, implants, bionics and robotics	4	-	Lecture, discussion, and e-learning	Dittha-yanan Pu-nyarata-bandhu
	Total	48	0		

2. Evaluation of the CLOs

2.1 Measurement and Evaluation of learning achievement

a. Formative assessment

N/A

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b. Summative assessment

(1) Tool and weight for measurement and evaluation

Learning Outcomes	Measurement Method	Weight (Percentage)	
CLO1 Explain evolutionary theory and identify real-world examples of evolution, identify and explain characteristics of Primates and Hominids, and identify key stages in the evolution of human society	Field trip report (group work)	5*	25
	Written Examination – MCQ, short responses, & essays	20	
CLO2 Use scientific understanding to debunk common myths and misperceptions about humans, and analyze the impact of scientific advancement on humans and society	Written Examination – MCQ, short responses, & essays	15	25
	Class assignments (presentations and discussions)	10	
CLO3 Apply key concepts to explain and analyze connections between past development and current situations, and predict future trends	Written Examination – MCQ, short responses, & essays	15	25
	Class assignments (presentations and discussions)	10	
CLO4 Work effectively in groups with members from diverse backgrounds and field of studies	Field trip (participation & ethics)	5*	15
	Field trip report (group work)	5*	
	Class assignments (presentations and discussions)	5	
CLO5 Use technology to enhance their learning experience	Field trip report, class assignments, presentations and online collaborative work	10	10

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(2) Measurement and evaluation

Grade	Achievement	Final Score (% range)	GPA
A	Excellent	90-100	4.0
B+	Very good	85-89	3.5
B	Good	80-84	3.0
C+	Fairly good	75-79	2.5
C	Fair	70-74	2.0
D+	Poor	65-69	1.5
D	Very poor	60-64	1.0
F	Fail	Less than 60	0.0

C+ to A (70-100; 2.5-4) = S; D to C (60-69; 1-2)= O; F (<60; 0)= U

Judgment of the learning outcomes in the general education courses

a. Use the symbols O, S, and U

b. Identify the judgment standard for each symbol.

c. Identify the symbol deemed as "pass."

(3) Re-examination (if the course allows any)

N/A

Re-examination: Explain the situation in which the course will provide students with re-examination and the judgement of the re-examination results.

3. Students' Appeal

N/A

Identify the following information: The method or channel the students will appeal to the course, the staff member who receives the appeals, and procedures or managing processes

Section 6 Teaching Resources

1. Required Texts

1).....

2).....

3).....

4).....

2. Suggested Materials

1) Cobb, A. B. (2003). The bionic human. New York, NY: The Rosen Publishing Group.
2) Dawkins, R. (2006). The Selfish Gene. 50th Anniversary Edition. Oxford: Oxford University Press.
3) Harari, Y. N. (2016). Homo Deus: A brief history of tomorrow. Random House.
4) Harrison, G.A., J.S. Weiner, J.M. Tanner, N.A. Barnicot. (1983). Human Biology: An Introduction to Human Evolution, Variation, Growth, and Ecology. Oxford: Oxford University Press.
5) Hill, A. and S. Ward (1988). Origin of the hominidae: The record of African large hominoid evolution between 14 my and 4 my. Yearbook of Physical Anthropology 31(59): 49–83.
6) Jurmain, R., L. Kilgore, and W. Trevathan. (2005). Introduction to Physical Anthropology 10th edition. Toronto: Wadsworth.
7) Kline, W. (2001). Building a better race: Gender, sexuality and eugenics from the turn of the century to the baby boom. Berkeley and Los Angeles, CA: University of California Press
8) Knoepfler, P. (2016). GMO sapiens: The life-changing science of designer babies. Singapore: World Scientific
9) Meskó, B. (2014). The guide to the future of medicine: Technology and the human touch. Webicina Kft.
10) Rowe, N. (1996). The Pictorial Guide to the Living Primates. New York: Pogonias Press.
11) Schimpff, S. C. (2007). The future of medicine: Megatrends in healthcare that will improve your quality of life. Nashvilla, TN: Thomas Nelson
12) Stein, P.L. and B.M. Rowe. (1995) Physical Anthropology: the Core. New York: McGraw-Hill.
13) Stein, P.L. and B.M. Rowe. (2000). Physical Anthropology 7th edition. New York: McGraw-Hill.
14) Turnbaugh, W.A., R. Jurmain, L. Kilgore, and H. Nelson. (2001). Understanding Physical Anthropology and Archaeology, 8th edition. Toronto: Wadsworth.
15) Wadhwa, V. and Salkever, A. (2017). The driver in the driverless car. Oakland, CA: Berrett-Koehler
16) Young, J.Z. An Introduction to the Study of Man. 1979. Oxford: ELBS & Oxford University Press.
17) Zimmer, C. (2005). Smithsonian Intimate Guide to Human Origins. Smithsonian Books.

3. **Other Resources (if any)**

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Section 7 Evaluation and Improvement of Course Implementation

1. Strategy for Course Effectiveness Evaluation by Students

Student feedback of instructors, teaching methods and materials, and course content through MUIC student evaluation forms

2. Strategy for Teaching Evaluation

Evaluation of effectiveness based on student evaluation scores and comments
Evaluation through peer observations by co-instructor or other Division faculty

3. Teaching Improvement

Adjustments based on student feedback, personal observations, comments from peer observations and discussions with supervisor and/or other Division faculty in one-on-one and/or group meetings as specified by MUIC guidelines.

4. Verification of Standard of Learning Outcome for the Course

Verification through student performance on assessments based on MUIC/Division standards.
Describe the process used to verify student achievement in accordance with the course learning outcomes, such as the passing score test, test analysis, or assignment. The processes may be different for different courses or for different learning outcomes.

5. Revision Process and Improvement Plan for Course Effectiveness

Course instructors (and coordinator/supervisor) will meet to discuss results of student evaluations and student performance based on learning outcomes in order to identify point for improvement. Strategy for improvement set according to MUIC/Division guidelines.

Remarks:

a. Identify ways to gain information used as input to evaluate the course effectiveness. The information includes teaching assessment, such as data from classroom observers and a teaching team or the student's academic performance. Also identify the analysis methods of the input data for teaching and course management improvement.

b. Describe mechanisms and methods to improve the course teaching and effectiveness such as an Executive Board Meeting to review and improve the course (which is reported in the TQF5 in every trimester), classroom research, and workshops for teaching improvement.

Appendix

Relations between the course and the General Education

Table 1 Relations between CLOs and MU-GE Module LOs (numbers in the table = Sub LOs)

(Course Code)	MU-GE LOs								
	MLO1	MLO2	MLO3	MLO4	MLO5	MLO6	MLO7	MLO8	MLO9
CLO1 Explain evolutionary theory and identify real-world examples of evolution, identify and explain characteristics of Primates and Hominids, and identify key stages in the evolution of human society	1.1 1.2	2.2	3.1	4.1	5.2	6.1	7.1	8.1 8.2 8.3 8.4	9.1 9.2
CLO2 Use scientific understanding to debunk common myths and misperceptions about humans, and analyze the impact of scientific advancement on humans and society	1.3 1.4	2.2	3.1 3.2	4.1 4.2	5.1 5.2	6.1 6.2	7.1	8.1 8.2 8.3 8.4	9.2
CLO3 Apply key concepts to explain and analyze connections between past development and current situations, and predict future trends.	1.1 1.2 1.3 1.4	2.2	3.1 3.2	4.1 4.2	5.1 5.2	6.1 6.2	7.1	8.1 8.2 8.3 8.4	9.1
CLO4 Work effectively in groups with members from diverse backgrounds and field of studies		2.2	3.1 3.2	4.2	5.1 5.2	6.1 6.2 6.3	7.1 7.2 7.3	8.1 8.2 8.3	9.1 9.2

						6.4		8.4	
CLO5 Use technology to enhance their learning experience	1.2 1.3				5.2	6.4	7.3	8.1 8.2 8.3	9.1

Remarks :

a. Each CLO should clearly correspond to the MU-GE LOs at the Sub LO level to show a clear connection and is shown in "Table 1".

b. Describe the MU-GE LOs and Sub LOs in details in "Table 2 LOs that the course is responsible for".

Table 2 LOs that the course is responsible for

MU-GE LOs	Sub los
MLO1 Create & construct an argument effectively as well as identify, critique and evaluate the logic & validity of arguments	1.1 Identify concepts related to the context of learned issues/topics
	1.2 Demonstrate ICT literacy: use appropriate technology to find, evaluate, and ethically use information
	1.3 Collect, analyse, synthesize data, & evaluate information and ideas from multiple sources relevant to issues/problems
	1.4 Synthesize information to arrive at logical reasoning
MLO2 Select & use techniques and methods to solve open-ended, ill-defined and multistep problems	2.2 Make judgment & decision through correct analysis, inferences, and evaluations on quantitative basis and multiple perspectives
MLO3 Acquire specific strategies & skills within a particular discipline and adapt them to a new problem or situation.	3.1 Connect, synthesize and/or transform ideas or solutions within a particular framework 3.2 Integrate alternative, divergent, or contradictory perspectives or ideas in the solution of a problem or question
MLO4 Create a novel or unique ideas,	4.1 Create an original explanation or solution to the is-

question, format, or product within a particular framework	sues/problems 4.2 Articulate the rationale for & consequences of his/her solution- identify opportunities & risk
MLO5 Explore and situate oneself in a new physical environment and intellectual perspectives	5.1 Demonstrate cultural competencies and adaptabilities in different working environments 5.2 Resort to multi-dimensional settings and tools to acquire knowledge and skills relevant to the problem or situation at hand
MLO6 Act autonomously within context of relationships to others, law, rules, codes, and values	6.1 Demonstrate an understanding of the principles upon which sustainable ecosystems and societies are built 6.2 Identify the national & global challenges associated with current economic, political, and social systems 6.3 Exhibit characteristics of responsible citizenship 6.4 Work effectively in diverse team (and multi-cultural settings)
MLO7 Apply ethical frameworks or principles and consider their implications in his/her decision-making and interacting with others.	7.1 Identify ethical issues and recognize different viewpoint and ideologies 7.2 Guide & lead others 7.3 Apply principle of ethical leadership, collaborative engagement, and respect diversity
MLO8 Use a variety of means/ technologies to communicate effectively and purposefully- e.g., share information/ knowledge, express ideas, demonstrate or create individual & group product, etc.	8.1 Communicate/present ideas effectively both oral & written forms, proper to a range of audience groups, such as verbal discussion with peers, project report. 8.2. Prepare a purposeful oral presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors. 8.3. Prepare written documents to express ideas/solutions

	using different writing technologies, and mixing texts, data, and images. 8.4. Demonstrate competence in a second or additional language
MLO9 Collaborate and work effectively as part of a student group/team member to arrive at the team shared-goals in time	9.1 Collaborate effectively with others as a responsible team member to achieve team goals in time 9.2 Interact with others respectfully, whether as a team member or leader, to create a productive teamwork

MU-GE Module LOs: At the end of studying MU-GE Module, successful students will be able to

Competences	LOs:	Sub LOs:
1. **Critical thinking & Analysis**: Use various sources and methods to collect and manage data & information and make a logical judgement and decision to arrive at a solution or problem solving relevant to real-world issues/ problems	1. Create & construct an argument effectively as well as identify, critique and evaluate the logic & validity of arguments	1. Identify concepts related to the context of learned issues/topics 2. Demonstrate ICT literacy: use appropriate technology to find, evaluate, and ethically used information 3. Collect, analyze, synthesize data, & evaluate information and ideas from multiple sources relevant to issues/problems 4. Synthesize information to arrive at logical reasoning
	2. Select & use techniques and methods to solve open-ended, ill-defined and multistep problems	1. Apply simple mathematical methods to the solution of 'real-world' problems 2. Make judgement & decision through correct analysis, inferences, and evaluations on quantitative basis and multiple perspectives 3. Apply concept of process management to solve problems
2. Creativity & Innovation: Show capability to initiate alternative/ new ways of thinking, doing things	3. Acquire specific strategies & skills within a particular discipline and adapt them to a new problem or situation	1. Connect, synthesize and/or transform ideas or solutions within a particular framework 2. Integrate alternative, divergent, or contradictory perspectives or ideas in the solution of a problem or question

Competences	LOs:	Sub LOs:
or solving problems to improve his/her or team solutions/ results by applying the evidence-based process management concepts	4. Create a novel or unique ideas, question, format, or product within a particular framework	1. Create an original explanation or solution to the issues/problems 2. Articulate the rationale for & consequences of his/her solution- identify opportunities & risk 3. Implement innovation through process management approach
	5. Explore and situate oneself in a new physical environment and intellectual perspectives	1. Demonstrate cultural competencies and adaptabilities in different working environments 2. Resort to multi-dimensional settings and tools to acquire knowledge and skills relevant to the problems or situation at hand
3. Global perspectives & Ethics: Express one's own ideas, interact with others, guide or lead team, as proper, as an ethically-engaged and responsible member of the society	6. act autonomously within context of relationships to others, law, rules, codes, and values	1. Demonstrate an understanding of the principles upon which sustainable ecosystems and societies are built 2. Identify the national & global challenges associated with current economic, political, and social systems 3. Exhibit characteristics of responsible citizenship 4. Work effectively in diverse team (and multi-cultural settings)
	7. Apply ethical frameworks or principles and consider their implications in his/her decision-making and interacting with others	1. Identify ethical issues and recognize different viewpoint and ideologies 2. Guide & lead others 3. Apply principles of ethical leadership, collaborative engagement, and respect diversity
4. Communication: Communicate effectively and confidently using oral, visual, and written language	8. Use a variety of means/ technologies to communicate effectively and purposefully; e.g., share information/ knowledge, express ideas, demonstrate or create individual &	1. Communicate/present ideas effectively both oral & written forms to appropriate audience, such as verbal discussion with peers, and written project reports. 2. Prepare a purposeful oral presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors. 3. Prepare written documents to express ideas/solutions using different writing technologies, and mixing texts, data, and

Competences	LOs:	Sub LOs:
	group product, etc.	images. 4. Demonstrate competence in a second or additional language
5. Collaboration and Working with team: Collaborate and work effectively with team to arrive at team goals	9. Collaborate and work effectively as part of a student group/team member to arrive at the team shared-goals in time	1. Collaborate effectively with others as a responsible team member to achieve team goals in time 2. Interact with others respectfully, either as a team member or leader, to create a productive teamwork

1. Lesson Plan

Class	Topic/Details	Number of hours		Online Sessions	On-Campus	Instructors	Note
		In-Class sessions	Lab sessions				
1	Sat 10.00-11.50	2		X		Ramesh Boonratana	
2	Sat 14.00-15.50	2		X		Ramesh Boonratana	
3	Sat 10.00-11.50	2		X		Ramesh Boonratana	
4	Sat 14.00-15.50	2		X		Ramesh Boonratana	
5	Sat 10.00-11.50	2		X		Ramesh Boonratana	
6	Sat 14.00-15.50	2		X		Ramesh Boonratana	
7	Sat 10.00-11.50	2		X		Ramesh Boonratana	
8	Sat 14.00-15.50	2		X		Ramesh Boonratana	
9	Sat 10.00-11.50	2		X		Ramesh Boonratana	
10	Sat 14.00-15.50	2		X		Ramesh Boonratana	
11	Sat 10.00-11.50	2		X		Ramesh Boonratana	
12	Sat 14.00-15.50	2		X		Ramesh Boonratana	
13	Sat 10.00-11.50	2		X		Ramesh Boonratana	
14	Sat 14.00-15.50	2		X		Ramesh Boonratana	
15	Sat 10.00-11.50	2		X		Ditthayanan Punyarat-abandhu	Part-time Instructor
16	Sat 14.00-15.50	2		X		Ditthayanan Punyarat-abandhu	Part-time Instructor
17	Sat 10.00-11.50	2		X		Ditthayanan Punyarat-abandhu	Part-time Instructor

18	Sat 14.00-15.50	2		X		Ditthayanan Punyarat-abandhu	Part-time Instructor
19	Sat 10.00-11.50	2		X		Ditthayanan Punyarat-abandhu	Part-time Instructor
20	Sat 14.00-15.50	2		X		Ditthayanan Punyarat-abandhu	Part-time Instructor
21	Sat 10.00-11.50	2		X		Ditthayanan Punyarat-abandhu	Part-time Instructor
22	Sat 14.00-15.50	2		X		Ditthayanan Punyarat-abandhu	Part-time Instructor
23	Sat 10.00-11.50	2		X		Ditthayanan Punyarat-abandhu	Part-time Instructor
24	Sat 14.00-15.50	2		X		Ditthayanan Punyarat-abandhu	Part-time Instructor
	Total	48				Ditthayanan Punyarat-abandhu	Part-time Instructor