

COURSE SYLLABUS
ILSE 660 Psychology and Philosophy for Education
Semester 2/2022, 2(2-0-4) credit hours

Course coordinator:

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 Office: Institute for Innovative Learning, Panyaphiphat Building, Room 226

Course instructors:

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|-------------|-------------------|----|--|--|
| Khajornsak | Buaraphan | KB | PhD (Science Education) | khajornsak.bua@mahidol.ac.th |
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| Patcharapan | Siriwat | PS | PhD (Education) | patcharapan.sir@mahidol.edu |
| Suchai | Nopparatjamjomras | SN | PhD (Science and Technology Education) | suchai.nop@mahidol.ac.th |
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Course description:

Fundamental psychology; developmental psychology; educational psychology; cognitive psychology; individual differences; inclusive education; multiple intelligences, educational guidance; counselling; philosophy, concept and theory in education, religion, economy, society and culture; educational concept and strategy for sustainable development

Course Learning Outcomes

| Course Learning Outcome | M.Sc. students | | Ph.D. students | |
|--|----------------|-----------|----------------|-----------|
| | ELO | Indicator | ELO | Indicator |
| 1. Enrolled students deliberate can actively participate and deliberate moral and ethical behavior concerns in class discussion to demonstrate their knowledge and understanding of psychological frameworks related to science and technology education | 1 | 1.1 | 1 | 1.1 |
| 2. Enrolled students can compose three theoretical papers to demonstrate their knowledge and understanding of psychological frameworks related to science and technology education | 2 | 2.1 | 2 | 2.1 |
| | 3 | 3.1 & 3.2 | 3 | 3.1 & 3.2 |

Weekly sessions: Friday 13.00-17:00 Hrs.

| Week | Date | Topic | CLO | Instructors | Teaching approach |
|------|------------------|--------------------------------------|----------|-------------|---------------------------------|
| 1 | 27 January 2023 | Personality and Digital footprints | CLO 1, 2 | SS PS | Lecture; Discussion; Case study |
| 2 | 10 February 2023 | Self-efficacy and Self-determination | CLO 1, 2 | KB PS | Lecture; Discussion; Case study |
| 3 | 17 February 2023 | Computational thinking | CLO 1, 2 | PL TP | Lecture; Discussion; Case study |
| 4 | 24 February 2023 | Cognition and Metacognition | CLO 1, 2 | PL KB | Lecture; Discussion; Case study |
| 5 | 17 March 2023 | Problem solving and Decision making | CLO 1, 2 | PL TP | Lecture; Discussion; Case study |
| 6 | 24 March 2023 | Mindset and Nudge theory | CLO 1, 2 | SS PS | Lecture; Discussion; Case study |
| 7 | 31 March 2023 | Empathy and Emotional intelligence | CLO 1, 2 | SS PS | Lecture; Discussion; Case study |
| 8** | 7 April 2023 | Creativity | CLO 1, 2 | SN | Lecture; Discussion; Case study |

**Remark: The session will be held during 13.00-15.00 Hrs.

Venue: Room 303 (Online learning is also available for oversea students and in any circumstances where face-to-face meetings are not possible)

Online:

Meeting link: <https://mahidol.webex.com/mahidol/j.php?MTID=m0f2a23c01ced33d5c3e6c50e72e6dae4>

Meeting number: 2642 330 6985

Password: ILSE

Host key: 897592

Readings: Handout(s) and/or research article(s) will be provided for students by the course instructors

Course Assignments:

1. Active participation (25%): To evaluate CLO 1

Each enrolled student is required to attend all sessions regularly and demonstrate their knowledge and understanding of each topic through active discussion. The active participation score will be given by every course instructor responsible for each of the sessions.

2. Theoretical papers (75%): To evaluate CLO 1 and CLO 2

Each enrolled student is required to submit **three 2000-word theoretical papers** (references excluded) on three different psychological topics. Each submitted article is expected to describe the theoretical background of the chosen psychological topic and discuss its importance in science and technology education research based on existing literature.

| Theoretical paper | Choose <u>one</u> topic to work on | Submission due date |
|---------------------------------------|--|----------------------------|
| Submitted article 1 (sessions 1-3) | Personality and Digital footprints, Self-efficacy, or Self-determination | 17 February 2023 |
| Submitted article 2 (sessions 4-6) | Cognition, Metacognition, Computational thinking, Problem-solving, or Decision-making | 24 March 2023 |
| Submitted article 3 (sessions 7-8) | Mindset, Nudge theory, Empathy, Emotional intelligence, or Creativity | 14 April 2023 |

Each theoretical paper is to be submitted to the course coordinator by 16:00 of the due date via email (suthiporn.saj@mahidol.ac.th) who is responsible for distributing the assignment to the instructor(s) teaching that chosen topic. The required components of the review article include

- The title
- Abstract (no longer than 150 words)
- Introduction to the concept
- Discussion based on the existing literature (relevant subheadings are possible)
- Conclusion
- References

Assessments:

Final grades will be determined by the total points earned, that is,

| | | |
|----------|---|----|
| 85-100% | = | A |
| 80-84% | = | B+ |
| 75-79 | = | B |
| Below 74 | = | I |

Important remarks:

1. The final score for each student will be rounded to the nearest whole number prior to assessing against the criteria. In addition, a student's final grade may be higher than the suggested guideline if the student's score is close enough (< 1% gap) to the next higher score. That is, close scores will likely earn the same final grade.
2. In order for students taking this course for Audit to get a passing grade (AU), they are required to attend at least 12 out of 15 sessions with active participation

Assessment criteria for the theoretical papers (2000 words each):

| | Criteria | Score | Mark |
|---|---|-------|------|
| 1 | Provide an appropriate title of the review article | 1 | |
| 2 | Summarise the main points of the review article (i.e. abstract) | 3 | |
| 2 | Describe the theoretical background of the chosen psychological topic (i.e. introduction) | 5 | |
| 3 | Discuss why this chosen psychological topic is important in science and technology education based on the existing literature | 10 | |
| 4 | Conclude major points of the review article | 2 | |
| 5 | Provide proper citations and references | 2 | |
| 6 | Use appropriate academic language and essay structure | 2 | |
| | Total | 25 | |

This is used for the three assigned theoretical papers mentioned above

Detailed explanation of the components expected to write in the theoretical papers

| Aspect | Detailed explanation |
|--------------|--|
| Title | <ul style="list-style-type: none">● Indicate accurately the scope of the article● Avoid using abbreviations● Use words that create a positive impression and stimulate readers' interest |
| Abstract | <ul style="list-style-type: none">● Include the purpose of the article● Include only the main points of the article● Point out key contributions of the article |
| Introduction | <ul style="list-style-type: none">● Provide background information specific to the topic● Define terms that may be unfamiliar● Explain the scope of the discussion● State the purpose for writing the review |
| Discussion | <ul style="list-style-type: none">● Present materials that are relevant to the topic and draw their logical connections to form a critical discussion (ELO 2, Indicator 2.1; ELO 3, Indicator 3.1, 3.2) <p><i>Note: A theoretical paper is not simply a summary of literature, but to analyse, synthesise, and interpret the information regarding teaching and learning in science and technology education in some meaningful way. The main body of the article containing information that develops and supports the purpose of the article</i></p> |

| Aspect | Detailed explanation |
|------------|---|
| Conclusion | <ul style="list-style-type: none"> ● Illustrate key connections of the discussion points ● Link the key points to broader discussion to highlight the usefulness of this review |
| References | <ul style="list-style-type: none"> ● Use the APA citation style throughout (ELO 1, Indicator 1.1) |

Please note that any formal appeal made to raise concern about the courses including learning, teaching, and assessment methods, as well as the IL programme including facilities and infrastructure can be made through the Education website (<https://il.mahidol.ac.th/eng/education/>)