



Course Outline

EE215 Research Methodology

Semester 2/2025 (January 5 - May 2, 2026)

Lecture Time: Tuesday, 09.00-12.00 hours

Lecture Venue: Room 204

Teaching Materials Platform. MS Team

Instructor: Asst. Prof. Dr. Wanwiphang Manachotphong

Email: wanwiphang@econ.tu.ac.th

Office hours: by appointment

Section	Lecture Time	Venue	Instructor	e-mail
046401	Tue 9.00–12.00hrs.	203	Dr.Winai Homsombat	winai@econ.tu.ac.th
046402	Tue 9.00–12.00hrs.	204	Asst.Prof.Dr.Wanwiphang Manachotphong	wanwiphang@econ.tu.ac.th
046403	Mon13.00–16.00hrs.	201	Ajarn Pit Jongwattanakul	pit@econ.tu.ac.th
046404	Tue 9.00–12.00hrs.	101	Dr.Brian Patrick Kennedy	bpk@econ.tu.ac.th
046405	Tue 9.00–12.00hrs.	201	Asst.Prof.Dr.Chayanee Chawanote	chayanee@econ.tu.ac.th

Number of Credit: 3 Credits (3-0-6)

Prerequisite: Have earned credits of EE211 and EE212 and EE325 (or EE425)

Course Description:

Study methods of conducting research and writing report in economics by studying the meaning and objectives and economic research characteristics. Study the composition and process of conducting research consisting of topic selection. Defining Objectives and Scopes setting and testing hypotheses for the use of educational theories and methods; Various statistical sources, both primary and secondary. preparation of research projects, proposals, data processing, and analysis and writing of research reports

Course Objectives:

The primary objective of this course is to teach and prepare students to write a competent, and useful, paper that advances the science of economics. To do this, students will need to acquire the knowledge of how academic papers need to be organized, and written, which requires the mastery of several discrete skills. By the end of the semester, it is expected that the students will have mastered the Course Learning Outcomes (CLAs) presented below, showing a basic level of competence in all the skills and knowledge necessary to write a research paper, as detailed in the Program Learning Outcomes (PLOs) that operationalize the tasks that need to be mastered.

Recommended Texts & Materials

The main text will vary from student to student, based upon the topic they choose to research, and the papers assigned, and that they will then find. But overall, students will be reading a large number of abstracts, and a smaller number of articles. Student specific mandatory articles will be assigned in week two or three, depending on the topic of research they chose. Further articles and/or abstracts will then follow.

Attendance: Most of the skills that are being taught, and the time spent mastering them, will occur in class. Therefore, **ATTENDANCE IS MANDATORY**. If students cannot attend class, they should notify their professor beforehand with an explanation as to why. The class is being taught simultaneously by several professors, but the classes are not all at the same time. Therefore, if you are going to miss a class, you should try to take it at one of the other available times. All your instructors are working from the same script; every effort is being made to give all students the same experience.

Grading This course will be graded on a pass/fail criteria, with scores calculated on four criteria. The students need to earn at least 60% and miss no more than 4 classes to pass the course.

Attendance: 45%

In-class writing assignments: 30% (individual and group assignments.)

Final Mini-Paper: 15% (Submit by Monday, May 18, 2026)

Final Presentation: 10%

In-class writing assignments will be completed during class time. All work must be handwritten and completed independently. The goal is to practice and develop your own writing skills, so the use of A.I. tools is not permitted. Please come prepared with your own pens, erasers, and any other supplies you may need. Scratch paper will be provided if you would like to outline or draft before writing your final response.

You will be expected to write many papers in class. You **MAY NOT** access your phones/tablets/laptops etc. Your instructors will be available in the class to give you advice, guidance, and corrections. At the end of class, you must submit these papers electronically (a picture) to the relevant google classroom or Microsoft team assignments, which will be scheduled to end shortly after class, this way your instructors can look at them after class and provide more feedback.

At the end of the semester, you will compile and submit a **final mini paper**. Much of it will be based on what you have previously written, but you will have to put it all together. You will be given 5-7 minutes to make your **final presentation** to the class on the final day of class.

ACADEMIC CALENDAR & HOLIDAY

Semester 2/2025 (January 5 - May 2, 2026)

January 5 – 18, 2026 Add-drop period

January 19 – March 15, 2026 Withdrawal period with “W” on record

Mid-term Examination Period February 22 – 28, 2026

Makha Bucha Day * March 3, 2026

March 16 – April 20, 2026 Special Withdrawal with “W” on record

April 6, 2026 King Rama I Memorial and Chakri Day*

April 13 – 18, 2026 Songkran Festival Day*

Last day of class for Semester 2/2025 May 2, 2026

May 11, 2026 Royal Ploughing Ceremony*

Final exam period May 5 – 19, 2026

Submitting Forms for Degree Conferral (ID.64-65) January 5 – 18, 2026

* Holiday, No classes during this period

Semester Schedule

Weekly Schedule

Week	Topic / Focus	Activities & Outputs
1	Course Overview & Research Paper Structure	<ul style="list-style-type: none"> • Lecture: components of an economics paper (Intro–Lit Review–Method–Results–Conclusion). • Show model examples from journals. • Assign: choose a broad research topic of interest.
2	Finding a Research Question	<ul style="list-style-type: none"> • Lecture: what makes a good research question (relevance, feasibility, contribution). • In-class brainstorming using economics themes. • Workshop: refine questions into testable hypotheses.
3	How to Write an Introduction	<ul style="list-style-type: none"> • Discuss: functions of the introduction (motivation, question, contribution, structure). • Read 2 sample introductions; identify strong/weak elements. • Assignment: draft an outline of your own introduction.
4	Writing Motivation and Context	<ul style="list-style-type: none"> • Practice writing first paragraphs that “hook” the reader. • Peer review of introduction outlines. • Revise based on feedback.
5	Research Gaps and Contribution	<ul style="list-style-type: none"> • Lecture: how to identify and articulate research gaps. • Activity: review 2–3 related studies and summarize their limitations. • Assignment: draft full introduction (1–2 pages).
6	Introduction Revision Workshop	<ul style="list-style-type: none"> • Peer editing session using a checklist (clarity, motivation, question, contribution). • Instructor feedback on draft intros.
7	Searching, Screening and Selecting Economic Literature	<ul style="list-style-type: none"> • <i>Workshop</i>: Database search workshop (Google Scholar, EconLit, SCOPUS). • <i>Activity</i>: Designing a Search Strategy, Screening Titles and Abstracts, Selecting Core Papers • <i>Output</i>: Short written summaries of searching, screening, and selecting economic literature.
8	Extracting Evidence, Quality Assessment, and Literature Synthesis	<ul style="list-style-type: none"> • <i>Lecture</i>: how literature reviews synthesize rather than list studies. • <i>Activity</i>: Group-based extraction, quality assessment, synthesis, and visualization of selected economic studies. • <i>Output</i>: Short written summaries of extracting, assessing, and synthesizing economic evidence.

Week	Topic / Focus	Activities & Outputs
9	Writing the Literature Review	<ul style="list-style-type: none"> • How to link studies and identify patterns or debates. • Write a 1–2 paragraph section connecting at least 3 papers. • Peer feedback in class.
10	Advanced Literature Review Techniques	<ul style="list-style-type: none"> • Discuss citation, paraphrasing, and avoiding plagiarism. • In-class revision and integration practice. • Assignment: complete first draft of full literature review.
11	Transitioning from Literature to Methodology	<ul style="list-style-type: none"> • How to justify your method using the reviewed literature. • Discussion: empirical strategies in economics (OLS, RCT, DiD, IV, etc.). • Identify data sources for each topic.
12	Designing the Methodology Section	<ul style="list-style-type: none"> • Explain structure: model/equation, variable definitions, data, estimation approach. • Activity: students outline their empirical framework.
13	Writing the Methodology Section	<ul style="list-style-type: none"> • Write-up workshop: data description and model specification. • Peer review of draft methodology.
14	Integration and Consistency	<ul style="list-style-type: none"> • Combine all sections: intro–lit review–methodology. • Ensure logical flow between research question, literature, and methods. • Instructor consultations. • Presentation (how to give a good presentation)
15	Final Revision & Presentation	<ul style="list-style-type: none"> • Short student presentations (5–7 min per paper). • Final feedback and discussion on improving academic writing style. • Submit complete mini-paper (Intro + Lit Review + Methodology).

Course Learning objectives and Program Learning outcomes

Learning Management and Evaluation

CLO	PLO	Learning Management	Evaluation
CLO1 Explain the structure, objectives, and conventions of an academic research paper in economics.	K1, E1	Lectures on research paper structure; analysis of published economics journal articles; in-class discussion.	Attendance; in-class writing and identification exercises.
CLO2 Formulate a clear, feasible, and relevant economic research question and testable hypothesis.	K1, S1	Brainstorming workshops; guided research question development; peer discussion and instructor feedback.	In-class writing assignments; participation.
CLO3 Search for, screen, and select relevant economic literature using academic databases.	S3, E1	Database workshops (Google Scholar, EconLit, Scopus); guided searching and screening activities.	Written summaries of literature search and screening process; in-class assignments.
CLO4 Critically evaluate and synthesize economic literature to identify research gaps and contributions.	K1, S1	Group-based literature synthesis activities; peer discussion; instructor-led feedback sessions.	Draft literature review sections; in-class writing assignments
CLO5 Design an appropriate empirical methodology consistent with the research question and reviewed literature.	S1, S3	Lectures on empirical strategies; methodology outlining workshops; peer review of research design.	Draft methodology section; in-class assignments.
CLO6 Write coherent and academically appropriate sections of a research paper (Introduction, Literature Review, Methodology).	S2, C1	Writing workshops; peer editing sessions; instructor feedback and revision activities.	Final mini-paper.
CLO7 Present research ideas and findings clearly and professionally in oral and written forms.	S2, C2	Presentation skills lecture; student presentations; class discussion and feedback.	Final presentation; participation.

Learning Assessment Plan

CLO	Methods of Learning Assessment	Assessment Week	Proportion of Assessment
CLO1	Attendance; in-class exercises	Weeks 1-15	45%
CLO2	In-class writing assignments (research question & hypothesis drafting)	Weeks 2-4	30%
CLO3	Written summaries of literature search, screening, and selection	Weeks 7-8	
CLO4	Draft literature review sections; peer and instructor feedback	Weeks 9-10	
CLO5	Draft methodology section	Weeks 12-13	
CLO6	Final mini-paper submission	Week 15	15%
CLO7	Oral presentation	Week 15	10%