

NATIONAL TAIWAN UNIVERSITY

Office of Academic Affairs

Center for Teaching and Learning Development

Teaching Practice Incubation Program Proposal for 2024 Spring Semester

Applicants **should not apply for the program if the project or similar project has already been subsidized or is under review by other programs.** The applicants should take full responsibility for any violation of academic integrity proved by concrete evidence. Center for Teaching and Learning Development may retrieve part of or all of the grant and terminate the principal investigator's right to apply for the program depending on the severity of the violation.

- For this semester, the theme is "**Integrating Generative AI into Teaching**" for "Scholarship of Teaching and Learning(SoTL)". Applications not adhering to this theme will not be considered in this cycle.
- Definition of Generative AI: "Based on the training of the large language model, it can generate new text, images, sound, animations, 3D models, or other types of data in response to user input (such as text, images, sound, etc.)." (Cornell University, Coursera, Google, Nvidia, 2023).
- Definition of SoTL: To enhance teaching quality and improve student learning outcomes, the researches identify issues in the teaching environment, adopt suitable approaches such as course design, teaching materials and methods, and the integration of teaching aids and technology media. Appropriate research methods and assessment tools are employed to verify the effectiveness of the researches.(MOE Teaching Practice Research Program).

(You may delete this page when submitting the project proposal.)

A. General Information (Item A and B are limited to 10 pages in total.)

Name of Applicant	
Institution / Department	
Phone Number and Email	
Project Title	
Abstract (Max. 300 Words)	
3-5 Keywords in Chinese	
3-5 Keywords in English	
Previous Projects (Please indicate the year/semester of the application)	☐ Teaching Practice Incubation Program _____ ☐ Ministry of Education Teaching Practice Research Program _____
Co-Principal Investigator Name, Affiliation, and Role in the Project, if applicable	

Generative AI tools used in this project (if more than two tools are used, please add or adjust the fields accordingly)

Tool Name	
Tool URL	
Basic Checklist for Generative AI	☐ Capable of receiving prompts ☐ Able to generate new content based on prompts

B. Research Proposal

1. **Motivation** (Please describe what problems you have found in your teaching, their significance for your teaching, and why you believe the generative AI tool can solve your problem.)
2. **Research Objectives and Research Questions** (The objectives should be clear: use generative AI to solve the problems in teaching. Please list specific and measurable questions with question marks. The questions should be the core for literature review, instructional design, and evaluation of effectiveness.)
3. **Literature Review** (The theoretical foundation of the instructional design. Please conduct a literature review focused on the research question and the proposed solution. Please indicate the type of generative AI tool you plan to use, its main functions, and how you intend to use it. You may refer to the studies in your fields, such as engineering education, science education, language education, drama education, etc.)
4. **Instructional Design** (Include course objectives, course assessment methods, course planning, teaching methods or strategies, etc. Please explain how you will integrate

generative AI tools into your teaching to address the research problem you have identified.)

- It is advisable to list the course syllabus and the plan for integrating generative AI into teaching, such as:

Week	Course Topic	Implementing Generative AI in Teaching	
1	aaa	Using [Tool Name] for [Specific Task]	
2	bbb	Employing [Another Tool] for [Different Task]	
...			

- Research Design** (The process for verifying the effectiveness of the teaching design, includes the research subjects, tools, methods and steps, research process, and data collection and analysis methods. A diverse range of assessment approaches should be adopted.)

- It is suggested to outline the correspondence between research questions, methods, tools, and the implementation process, to present a clearer research framework:

Research Question	Research Method	Research Tool	Implementation Process
aaaa	Survey	Scale adapted from 'ooo' (see Appendix C)	Week 'o' (pre-test), Week 'x' (post-test)

bbbb	Interview	Interview outline (see Appendix Z)	Invite 'n' students on a random basis for interviews after the final exam

6. **The Innovation of the Project** (The differences between this project and previous teaching or your previous SoTL projects.)

C. 2024 Spring Semester Course Information (Fill out one form for each course. Add new forms for multiple courses.)

Course Title	
Curriculum Number/Class/Time	
Instructor(s) (Must include the applicant)	☐ Taught Alone ☐ Co-Teaching, taught by several instructors and shared the credit hours ☐ Team-taught by several instructors and credit hours calculated according to the University regulation ☐ Others _____
Department(s)	

Credits	
The Maximum Number of Students	
Teaching Hours (per week)	____ hours in total (____ hours/per week) (including practicum ____ hours)
Target Students (Multi Choice)	☐ Undergraduate (☐ Freshman ☐ Sophomore ☐ Junior ☐ Senior) ☐ Graduate (☐ Master's ☐ Doctoral)
Experience of Teaching the Course	☐ Have offered this course before ☐ Have offered similar course(s) before, course title(s): _____ ☐ New course
Course Attributes (Multi Choice)	☐ Required ☐ Elective ☐ General Courses ☐ Liberal Education ☐ Academic Programs ☐ Intensive ☐ EMI ☐ Others _____
Course Types	☐ In-Person Classes ☐ Blended Learning ☐ Synchronous Online Learning ☐ Asynchronous Online Learning
Teaching Activities (Multi Choice)	☐ Lecture ☐ Hands-on Practice ☐ Group Interaction ☐ TEAL ☐ Others, please state: _____
Course Venue(s) (Multi Choice)	☐ Classrooms (☐ Using Future Classroom__ (Name of the Classroom) __) ☐ Other Campus Areas (e.g. NTUH, Experimental farm, etc.) ☐ Off-Campus Areas ☐ Others _____

● **Course Syllabus (Required)**

The application is open until **24pm January 18, 2024**. Please email the proposal (in word/odf and pdf format) to Ms. Chan via ycjhan@ntu.edu.tw.

2024 Spring NTU CTLD TPIP
Name of Applicant: Project Title