

Capstone Course Module Development and Application



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I. What is a capstone course?

The “Capstone Experience” allows students to experience meaningful reflection, integrate their academic and professional learning opportunities, and plan their future development. It can be a course, a plan, or an event in the department (institute). Currently, National Taiwan Normal University (NTNU) encourages departments (institutes) to develop students’ capstone experience through courses. It is a coming-of-age ceremony before graduation and an opportunity to instill department’s (institute’s) most treasured value, knowledge, and skills. A capstone course consists of five principles: Integration, reflection, closure, transition, and inspection (ICRTI). Integration refers to the integration of the knowledge and skills learned. Reflection refers to the reflection on their academic, social, and personal developments, and if there were any deficiencies. Closure is the capping of their learning experiences. Transition is the transitioning of professional learning to future careers; and Inspection is the review of department (institute) courses and instruction.

II. Why develop a capstone course module?

NTNU encourages its departments (institutes) to develop a summative, integrated curriculum by reviewing their curricular structure and assessing student learning performance. Since the promulgation of the NTNU Capstone Course Subsidies Project in the 2015 academic year, most of the capstone courses planned by departments (institutes) were stand-alone high level courses. To emphasize the links between foundational courses, core courses, and capstone courses, the Center for Teaching and Learning Development (CTLTD) has proposed the planning of capstone course modules in addition to capstone courses starting in the 2017 academic year; the dual-track approach allows CTLTD to assist departments (institutes) to review their curriculum, and strengthen the links among courses sequentially and laterally.

III. The Concept of Capstone Course Module

A module comprises three types of courses: foundational courses, core courses, and capstone courses. Among these three types of courses, there should be clear learning pathways and relevance to the core competencies of the department (institute). Simultaneously, to effectively track and evaluate students’ specific core competency developments, there should also be a systematic assessment of performance for students who have enrolled in the module.

1. **Foundational Courses:** These are foundational courses of the professional field. They provide learners with foundational knowledge and entry-level practice in a professional context. The courses explore problems and trigger learning motivations through problem-based learning, and take the problems they have generated into the subsequent entry-level core courses.
2. **Core Courses:** These are core courses of the profession. They are foundational research and advanced level practice that integrate professional core knowledge and skills. They are courses that build integrative experiences by strengthening the links and applications between theory and practice.

3. **Capstone Courses:** These courses consolidate and complete student learning. They aim to help students integrate and deepen what they have learned in the university. These courses summarize students’ professional learning, help students review and reflect on their university learning experiences and personal development, and transition professional learning to future career development.

IV. Application Information

In the second term of the 2019 school year, in order to motivate the departments (institutes) to examine the link between the cornerstone courses, keystone courses and capstone courses in the course framework, the capstone course module plan was implemented. From the 2022 school year onwards, in accordance with the adjustment of the school's term weeks from 18 weeks to 16 weeks, and the advancement of EMI courses and other measures by the departments (institutes), the application was fully reopened for all departments (institutes) once more.

1. Application process and review standards

Capstone Course Module
Application Process
<p>How to design a capstone course module:</p> <p>Departments (institutes) that had previously received capstone course subsidies should pair their capstone course with core courses or foundational courses that are aligned with its core competency, and adjust its pedagogy or content accordingly.</p> <p>Choose one capstone course, and couple it with several foundational or core courses. The combination of capstone course modules may be: (capstone + foundational), (capstone + core), or (capstone + core + foundational).</p> <p>Applications should have the department (institute) as the applicant and the department (institute) chair as the project lead in the planning and application of the capstone course module.</p> <p>The applying department (institute) should complete the "Capstone Course Subsidies (Capstone Course Module)" form at the end of October or March (see Attachment 1).</p> <p>Upon approval by department chair and college dean, please send paper application to CTLD and email an electronic copy to the listed email address</p>
Review Standard
<ol style="list-style-type: none"> 1. Goals and conceptualization of Capstone Course Module

1. The relevance among foundational, core, and capstone courses and the features of capstone course module.
2. The relevance between capstone course module and ICRTI
3. The potential of capstone course module in improving department (institute) framework
4. Feasibility of the project plan
5. The suitability of the proposed budget

2. Course content implementation plan for capstone course module

1. Richness of each course. Please attach course syllabi (e.g., course features, content, instructional activities, assignment assessments, etc.)
2. How the courses respond to student learning outcome and department (institute) core competencies
3. Expected changes in learning and outcome for students
4. Specific assessment methods for learning and rubrics(see Attachment 3).

2. Review Method

CTLD will invite scholars and specialists of the field to review the application.

3. Project duration and financial support

The amount of funding will be adjusted based on the types, number, and content of the courses offered by the department (institute). Maximum funding for capstone course and capstone course module of each department (institute) is NT\$150,000. If the courses are offered in different semesters, project duration may be extended to 1 year.

V. Achievement Report and Effectiveness Tracking

1. Achievement Report: Applicants must submit an **End-of-term Achievement Report** (see Attachment 3 for Capstone Course Module End-of-Term Achievement Report) and the **Capstone Course Student Evaluation Survey** provided by CTLD within one month of the end of the project.
 2. Oral Sharing of Achievement: Share project achievements when CTLD holds capstone achievement presentation sessions. Applicants should authorize the Office of Academic Affairs to record video and audio of these sessions, or for other uses.
 3. Achievement tracking: After the project's conclusion, should the department or institute continue to offer capstone courses with the same course title, CTLD will provide a capstone course student evaluation survey to the department or institute three times for post-project tracking.
- ※ Effectiveness Tracking Report: Departments can apply for the " Capstone Course Core Competency Annual Assessment Analysis Report" - The Teaching Development Center will provide the departments with an capstone course student evaluation questionnaire, which can be used to track the same course name for three times, and complete the follow-up tracking for 1+3 times (the current plan test 1 time, the follow-

up tracking test 3 times). The CTLD will produce a report for the departments to refer to. If need this report, please check it in the application form (Annex 2).

VI. Contact Window

For any questions, please contact [Ms. Chen](#) at (02)7749-1892, E-mail: c31430@ntnu.edu.tw.

VII. Capstone Course Module Subsidy Project Implementation Flowchart

	Start	
Understand the spirit of capstone courses and review department (institute) curriculum framework		Capstone Course Core Course Foundational Course Capstone Course Module
Department (institute) chair lead in the planning and application of capstone course module		
Submit capstone course subsidies application (Capstone course module)		
Review	Not Approved	
Approved		
Offer Courses / Teaching	Instructional Content and progress planning Collect evidence of student learning Assess student learning outcome	
	Achievement Report and Outcome Assessment Capstone Course Module Submit “Capstone Course Module End-of-Term Achievement Report” “Capstone Course Student Evaluation Survey” Submit within one month of the end of the project. CTLD will publish and share project achievements.	Participate in the oral sharing session hosted by CTLD Capstone Achievement Presentation Session

	<p>※ Achievement Tracking and Department and Institute Feedback</p> <p>After the project has concluded, CTLD will keep track of the capstone courses three times. After the survey has been conducted 1+3 times (once during the project, and three times after the project has concluded), CTLD will provide a “Report on the Analysis of Past Assessments of Capstone Course Core Competencies”</p>	
	End	