

# National Taiwan Normal University Online Course Teaching Plan

Instructions: According to **Article 6 of the Implementation Regulations Regarding Distance Learning by Universities**, Departments/Programs offering distance learning courses, shall present a course plan and submit it for approval by the university-level academic affairs committee. The course plan referred to in the preceding paragraph shall set forth learning objectives, the target student group, a course outline, teaching methods, interactive student-teacher discussion, grading and course requirements. The course plan shall be posted on the Internet.

1. **Chinese Course Name:** 數學教學中的英語
2. **English Course Name:** English Language of Mathematics Teaching
3. **Course start date:** Spring semester of 2024
4. **Course review submission record**( if applicable):
  - (1) It is a new online course or an existing face-to-face course switching to online course in this semester
  - (2) It is an existing online course; the latest University's Course Committee approval was in the Fall semester of 2021 (academic year)
    - (2.1) The 5-year validity period has expired; a new application is required.
    - (2.2) In case of a major change in the original approved course or if the revision ratio exceeds 30%, reapplication is required.

## 5. Basic Course Information ( if applicable)

(1)	Instructor Name & Title	Adjunct Lecturer: Hung-Mei (Berri) Hsiao / 蕭弘玫 Associate Professor: Ting-Ying Wang / 王婷瑩
(2)	Instructor Sources	<input checked="" type="checkbox"/> Appointed by Departments <input type="checkbox"/> Appointed by General Education Center <input type="checkbox"/> Both of Above <input type="checkbox"/> Others:
(3)	College/Department/Center	The Department of Mathematics
(4)	School System	<input type="checkbox"/> Undergraduate Program <input type="checkbox"/> Master's Program <input checked="" type="checkbox"/> BA/MA Joint Course <input type="checkbox"/> MA/PhD Joint Course <input type="checkbox"/> PhD Program <input type="checkbox"/> Continuing Education Master's Program
(5)	Program Type	<input checked="" type="checkbox"/> Full-time Program <input type="checkbox"/> Part-time Program <input type="checkbox"/> Others:
(6)	Course Type	<input type="checkbox"/> Common Courses <input type="checkbox"/> General Courses <input type="checkbox"/> School Required Courses <input checked="" type="checkbox"/> Professional Courses <input type="checkbox"/> Educational Courses <input type="checkbox"/> Other:
(7)	Required Courses	<input type="checkbox"/> University-required <input type="checkbox"/> College-required <input type="checkbox"/> Graduate Institute-required <input checked="" type="checkbox"/> Department-required <input type="checkbox"/> Others:
(8)	Course Duration	<input checked="" type="checkbox"/> One Semester (half year) <input type="checkbox"/> Two Semesters (one year) <input type="checkbox"/> Others:
(9)	Required/Elective Course	<input type="checkbox"/> Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/> Others:
(10)	Course Credits	2 credits

(11)	Average of Face-to-Face Teaching Hours Per Week	_1_ hour(s)/week (Divide the total "face-to-face teaching" hours, including the hours of face-to-face teaching and synchronous teaching, by the total number of course weeks.)
(12)	Number of Classes	1
(13)	Estimated Total Number of Students	10
(14)	EMI Courses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(15)	Type of Cooperation with Domestic/Foreign Universities (omit if inapplicable)	1. Cooperative University: _____; Department/Institute: _____ Instructor Name: _____; Course Name: _____; Number of Students: _____ 2. <input type="checkbox"/> Partner University <input type="checkbox"/> Dual-Degree Program <input type="checkbox"/> Global Virtual Classroom Course <input type="checkbox"/> Others: _____
(16)	Course Platform Website (asynchronous teaching is required)	NTNU online learning platform: <a href="https://moodle.ntnu.edu.tw/">https://moodle.ntnu.edu.tw/</a>
(17)	Syllabus Website	<a href="http://courseap.itc.ntnu.edu.tw/acadmOpenCourse/index.jsp">http://courseap.itc.ntnu.edu.tw/acadmOpenCourse/index.jsp</a>

## 6. Course Teaching Design and Implementation Method

(1)	Course Goals	<ol style="list-style-type: none"> <li>Learn Vocabulary</li> <li>Learn common sentence and question structures.</li> <li>Learn typical confusions for mathematical English and everyday English</li> <li>Develop conversational and questioning skills</li> <li>Writing questions and assignments</li> <li>Collaborative and presentation skills</li> </ol>								
(2)	Target Student Group	Students who are taking IBEC Program-International Mathematics Education or Bilingual Mathematics Education Program or Mathematics Education Program.								
(3)	Prerequisite(s)	<ol style="list-style-type: none"> <li>Differentiated Instruction in Mathematics</li> <li>Inquiry and Practice in Mathematics</li> <li>Teaching Materials and Methods: Mathematics</li> <li>Curriculum Development and Design</li> </ol>								
(4)	<p>Course Content Outline: The followings take 16 weeks per semester for example:</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td rowspan="2">Face-to-Face Teaching</td> <td colspan="2">Distance learning</td> </tr> <tr> <td>Synchronous</td> <td>Asynchronous</td> </tr> <tr> <td><b>at least 2 weeks</b></td> <td><b>at least 3 weeks</b></td> <td><b>at least 8 weeks</b></td> </tr> </table> <p>Note: If the online course is offered with cooperative universities, it is not subject to the above teaching hours allocation.</p>		Face-to-Face Teaching	Distance learning		Synchronous	Asynchronous	<b>at least 2 weeks</b>	<b>at least 3 weeks</b>	<b>at least 8 weeks</b>
Face-to-Face Teaching	Distance learning									
	Synchronous	Asynchronous								
<b>at least 2 weeks</b>	<b>at least 3 weeks</b>	<b>at least 8 weeks</b>								

Week	Topics (If there are multiple instructors, please specify instructor names in each week)	Learning Objectives (From the perspective of students)	Teaching Interactive Design (Multiple choices allowed)	Testing/Evaluation Activities (Multiple choices allowed. Choose "None" if not designed for the week.)	Teaching Method and Hours (fill-in the number of hours, omit if none)		
					Face-to-Face Teaching	Distance learning	
						Synchrous	Asynchr onous
1	Vocabulary, pronunciation, and sentence and question structures (Hung-Mei Hsiao)	To know vocabulary, pronunciation, and sentence and question structures	<input checked="" type="checkbox"/> Topic discussion <input type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input type="checkbox"/> Others: _____ <input checked="" type="checkbox"/> None		2	
2	Vocabulary, pronunciation, and sentence and question structures (Hung-Mei Hsiao)	Same as above.	<input checked="" type="checkbox"/> Topic discussion <input type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input type="checkbox"/> Others: _____ <input checked="" type="checkbox"/> None		2	
3	Vocabulary, pronunciation, and sentence and question structures (Hung-Mei Hsiao)	Same as above.	<input checked="" type="checkbox"/> Topic discussion <input type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input checked="" type="checkbox"/> Others: Online tasks <input type="checkbox"/> None		2	
4	Confusions in everyday and mathematical English. (Hung-Mei Hsiao)	To analyze confusions in everyday and mathematical English.	<input checked="" type="checkbox"/> Topic discussion <input checked="" type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input type="checkbox"/> Others: _____ <input checked="" type="checkbox"/> None		2	
5	Confusions in everyday and mathematical English. (Hung-Mei Hsiao)	Same as above	<input checked="" type="checkbox"/> Topic discussion <input checked="" type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input type="checkbox"/> Others: _____ <input type="checkbox"/> None		2	

	6	Presentation of assignments, spoken and written (Hung-Mei Hsiao)	To understand presentation of assignments, spoken and written	<input checked="" type="checkbox"/> Topic discussion <input type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input type="checkbox"/> Others: _____ <input checked="" type="checkbox"/> None		2	
	7	Presentation of assignments, spoken and written (Hung-Mei Hsiao)	Same as above	<input checked="" type="checkbox"/> Topic discussion <input type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input type="checkbox"/> Others: _____ <input checked="" type="checkbox"/> None			2
	8	Presentation of assignments, spoken and written (Hung-Mei Hsiao)	Same as above	<input checked="" type="checkbox"/> Topic discussion <input type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input checked="" type="checkbox"/> Others: Online tasks <input type="checkbox"/> None			2
	9	Presentation of multiple solutions (Hung-Mei Hsiao)	To understand presentation of multiple solutions	<input type="checkbox"/> Topic discussion <input type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input checked="" type="checkbox"/> Others: Problem base learning	<input type="checkbox"/> Tests <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input type="checkbox"/> Others: _____ <input type="checkbox"/> None			2
	10	Discussion of different methods and alternatives (Hung-Mei Hsiao)	To discuss of different methods and alternatives	<input checked="" type="checkbox"/> Topic discussion <input checked="" type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input type="checkbox"/> Others: _____ <input checked="" type="checkbox"/> None			2
	11	Discussion of different methods and alternatives (Hung-Mei Hsiao)	Same as above	<input checked="" type="checkbox"/> Topic discussion <input checked="" type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input checked="" type="checkbox"/> Case study report <input type="checkbox"/> Others: _____ <input type="checkbox"/> None			2
	12	Diagnostic	To conduct diagnostic	<input type="checkbox"/> Topic discussion	<input type="checkbox"/> Tests			2

		questioning (Hung-Mei Hsiao)	questioning	<input checked="" type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input type="checkbox"/> Others: _____ <input checked="" type="checkbox"/> None			
	13	Diagnostic questioning (Hung-Mei Hsiao)	Same as above	<input type="checkbox"/> Topic discussion <input checked="" type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input checked="" type="checkbox"/> Case study report <input type="checkbox"/> Others: _____ <input type="checkbox"/> None			2
	14	Deep case study collaborative assignment with individual, reports and presentations (Hung-Mei Hsiao)	To design, plan and discuss deep case study collaborative assignment with individual, reports and presentations	<input type="checkbox"/> Topic discussion <input checked="" type="checkbox"/> Group discussion <input type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input type="checkbox"/> Others: _____ <input checked="" type="checkbox"/> None			2
	15	Deep case study collaborative assignment with individual, reports and presentations (Ting-Ying Wang)	Same as above	<input type="checkbox"/> Topic discussion <input type="checkbox"/> Group discussion <input checked="" type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input checked="" type="checkbox"/> Others: Presentation <input type="checkbox"/> None	2		
	16	Deep case study collaborative assignment with individual, reports and presentations (Ting-Ying Wang)	Same as above	<input type="checkbox"/> Topic discussion <input type="checkbox"/> Group discussion <input checked="" type="checkbox"/> Peer review <input type="checkbox"/> Instructor feedback <input type="checkbox"/> Others: _____	<input type="checkbox"/> Tests <input type="checkbox"/> Assignments <input type="checkbox"/> _____ exam <input type="checkbox"/> _____ report <input checked="" type="checkbox"/> Others: Presentation <input type="checkbox"/> None	2		
(5)	Teaching Methods	<p>(<input checked="" type="checkbox"/> if included; multiple choices allowed)</p> <p><input checked="" type="checkbox"/> 1. Provide primary and supplementary materials for online courses</p> <p><input checked="" type="checkbox"/> 2. Provide face-to-face teaching, number: <u>  2  </u> time(s), total hour(s): <u>  4  </u> hour(s)</p> <p><input checked="" type="checkbox"/> 3. Provide synchronous teaching, number: <u>  6  </u> time(s), total hour(s): <u> 12 </u> hour(s)</p>						

		<input checked="" type="checkbox"/> 4. Provide asynchronous teaching, number: <u>  8  </u> time(s), total hour(s): <u> 16 </u> hour(s) <input checked="" type="checkbox"/> 5. Provide topic discussion activities <input checked="" type="checkbox"/> 6. Provide cooperative learning activities between students <input checked="" type="checkbox"/> 7. Mutual learning through students' works <input type="checkbox"/> 8. Others: (please specify)
(6)	Learning Management System (moodle)	<p>Which moodle functions are used in this course? (<input checked="" type="checkbox"/> if included; multiple choices allowed)</p> <p>Note: For teachers and students from domestic or foreign universities who are participating in joint programs that require access to Moodle, please have the course instructor contact the platform manager at extensions 5673 or 5579. E-mail: elearn@ntnu.edu.tw</p> <input checked="" type="checkbox"/> 1. Personal data <input checked="" type="checkbox"/> 2. Course information <input checked="" type="checkbox"/> 3. Latest News release & browse <input checked="" type="checkbox"/> 4. Course materials viewing & download <input type="checkbox"/> 5. Grade system management & inquiry (omit if inapplicable) <input type="checkbox"/> 6. Perform online testing (omit if inapplicable) <input checked="" type="checkbox"/> 7. Learning information <input checked="" type="checkbox"/> 8. Interactive learning design (chat room or discussion area) <input type="checkbox"/> 9. Other related functions: (please specify)
(7)	Public Information about Interactive Teaching	<p>Instructor Profile and Published Works (webpage link instructions can be attached):</p> <p><b><u>Hung-Mei (Berri) Hsiao</u></b>  <b>Clackamas Community College</b> – Full Time Math Instructor, September 2019 to present  <b>Lane Community College</b> – Full Time Math Instructor, August 2008 to August 2019  <b>National Taiwan Normal University</b> – Visiting scholar on sabbatical, Fall term 2018  <b>University of Oregon</b> – Math Instructor, September 2004 to June 2008, Summer 2013 and 2014  <b>Lane Community College</b> – Part Time Math Instructor, September 2001 to June 2008  <b>Center for Educational Policy Research, University of Oregon</b> – Consultant, 2005 – 2006  <b>Oregon Department of Education</b> – Math Assessment Specialist for CIM, 2001 and 2002  <b>Churchill High School</b> – Math Teacher, August 2000 to June 2001  <b>Willamette High School</b> – Math Teacher, September 1999 to June 2000  <b>Math Tutor</b> – Lane Community College and private, September 1995 to December 1999  <b>Unlimited English</b> (Taipei, Taiwan) – English as a Second Language Teacher, August 1991 to February 1993  <b>Forimex Limited</b> (Taipei, Taiwan) – Consultant and translator, September 2005 to present</p>

		<p><b><u>Ting-Ying Wang</u></b>  <b>National Taiwan Normal University</b>-Associate Prof., January 2022 to present  <b>National Taiwan Normal University</b>-Assistant Prof., January 2018 to January 2022  <b>National Taiwan Normal University</b>-Project Assistant Prof., January 2015 to January 2018  <b>Michigan State University</b>-Postdoctoral research fellow, August 2014 to May 2015</p> <p>Instructor E-mail:  <b><u>Hung-Mei (Berri) Hsiao</u></b> berri_hsiao@yahoo.com  <b><u>Ting-Ying Wang</u></b> ting@math.ntnu.edu.tw</p> <p>Online Office Hours (at least 1 hour per week): Monday 10-11 a.m. (online)</p> <p>Teaching Assistant's Name/E-mail (omit if inapplicable):陳郁柔（數碩四）/ivy19970422@gmail.com</p> <p>Others(omit if inapplicable):</p>
(8)	Course Material Production	<p>(<input checked="" type="checkbox"/> if included; multiple choices allowed)</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> 1. Provide appropriate reminders of key points</li> <li><input checked="" type="checkbox"/> 2. Provide teaching-related examples</li> <li><input checked="" type="checkbox"/> 3. Provide teaching-related exercises and reflective activities</li> <li><input checked="" type="checkbox"/> 4. Provide supplementary teaching materials or online resources</li> <li><input checked="" type="checkbox"/> 5. Provide instructions for self-directed learning</li> <li><input checked="" type="checkbox"/> 6. Learning objectives are consistent with course goals</li> <li><input type="checkbox"/> 7. Others:</li> </ul>
(9)	Assignment Submission Method	<p>(<input checked="" type="checkbox"/> if included; multiple choices allowed)</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> 1. Provide online assignment content description</li> <li><input checked="" type="checkbox"/> 2. Assignment file upload and download</li> <li><input type="checkbox"/> 3. Others:</li> </ul>
(10)	Assessment	<p>※ <b>To comply with the spirit of online course design, please understand and agree to the contents of the following 3 items, and provide detailed description:</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> 1. The course can provide evaluation results and feedback for each learning evaluation</li> <li><input checked="" type="checkbox"/> 2. The evaluation has taken the students online learning history and participation level into account</li> <li><input checked="" type="checkbox"/> 3. The percentage of each score is explained in detail below:  (Evaluation methods, and their total score percentage)  (1) Assignment 20%  (2) Discussion 15%</li> </ul>

		<p>(3) Attendances 5%</p> <p>(4) Presentation 20%</p> <p>(5) Case study reports 20%</p> <p>(6) Contribute to online tasks 20%</p>
(11)	Precautions for Class:	The course is the Fully English-Taught Course. Vocabulary and language use for mathematics teaching and development of conversational English language skills for teaching. The graduate student without the education program must contact the department for the issue of course-selecting.
(12)	<p><b><u>Observe intellectual property rights in the creation of course content.</u></b></p> <p>※ Pay attention to any infringement of copyright or other rights in the creation of relevant teaching content.</p> <p>※ If the copyright for any part of the teaching content is owned by others and authorization has been obtained from the rights holder, please indicate the source of the material.</p>	