

Tamkang University Academic Year 2012, 2<sup>nd</sup> Semester  
Course Syllabus

Course Title	Literature and Resources of Science and Technology	Instructor	Dr. Ling-Ling Lai	
Department/Year/Class	Course Details			
Dept. of Information and Library Science/Senior year/Class A	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Selective	<input type="checkbox"/> 0 ( One Semester ) <input type="checkbox"/> 1 ( 1st Semester ) <input checked="" type="checkbox"/> 2 ( 2nd Semester ) <input type="checkbox"/> 3 ( 3rd Semester )	Credits	2
Aim of Education		Core Competences		
Our mission is to educate and train library and information professionals.		(A) To understand concepts relating to library and information science and to grasp the relevant trends, (B) To acquire professional abilities to develop, organize, preserve and integrate all sorts of information resources, (C) To understand concepts relating to information technology and systems, and be able to put them in use, (D) To acquire communication and coordination skills required for the information services, (E) To acquire management skills required by all sorts of libraries and information organizations, (F) To acquire professional skills to manage electronic documents and archives, (G) To acquire integration ability of library services and traditional publishing, and (H) To acquire integration ability of library services and digital publishing.		
<b>Course Introduction (50 to 100 words)</b>	This course is a continual study of resources for the science and technology. With the understanding of various types of literature (such as technical reports, patents, conference proceedings, dissertations, etc.) in science and technology from the previous semester, we are now focus on selected subjects in science and technology and their reference tools in this semester.			

## The Relevance among Teaching Objectives, Objective Levels and Core Competences

### I. Objective Levels (select applicable ones) :

**(I) Cognitive Domain : C1 Remembering 、 C2 Understanding 、 C3 Applying 、 C4 Analyzing 、 C5 Evaluating 、 C6 Creating**

**(II) Psychomotor Domain : P1 Imitation 、 P2 Mechanism 、 P3 Independent Operation 、 P4 Linked Operation 、 P5 Automation 、 P6 Origination**

**(III) Affective Domain : A1 Receiving 、 A2 Responding 、 A3 Valuing 、 A4 Organizing 、 A5 Charaterizing 、 A6 Implementing**

### II. The Relevance among Teaching Objectives, Objective Levels and Core Competences :

(I) Determine the objective level(s) in any one of the three learning domains (cognitive, psychomotor, and affective) corresponding to the teaching objectives. Each objective should correspond to the objective level(s) of ONLY ONE of the three domains.

(II) If more than one objective levels are applicable for each learning domain, select the highest one only. (For example, if the objective levels for Cognitive Domain include C3, C5, and C6, select C6 only and fill it in the boxes below. The same rule applies to Psychomotor Domain and Affective Domain.)

(III) Determine the core competences that correspond to each teaching objective. Each objective may correspond to one or more core competences at a time. (For example, if one objective corresponds to three core competences: A, AD, and BEF, list all of the three in the box.)

Teaching objectives	Relevance	
	Objective Levels	Core Competences
1 Understand how to use major reference tools in disciplines of science and technology.	III	A6
2 Become familiar with the trends and up-and-coming areas of research in science and technology.	I	C6
3 Gain understanding of trends in scientific publishing and discussions surrounding access to information in science.	III	A6
4 Understand how professionals in different fields of science and technology work and research.	I	C6
5		
6		
7		
8		

### Teaching Objectives, Teaching Methods and Assessment

Teaching Objectives	Teaching Methods	Assessment
1 Understand how to use major reference tools in disciplines of science and technology.	Lecture, Discussions, In class assignment	Discussions, Hands-on Assignments/Projects

2 Become familiar with the trends and up-and-coming areas of research in science and technology.	Lecture, Discussions, In class assignment	Discussions, Hands-on Assignments/Projects
3 Gain understanding of trends in scientific publishing and discussions surrounding access to information in science.	Lecture, Discussions, In class assignment	Discussions, Hands-on Assignments/Projects
4 Understand how professionals in different fields of science and technology work and research.	Lecture, Discussions, In class assignment	Discussions, Hands-on Assignments/Projects

This course has been designed to cultivate the following essential qualities in TKU students.

Essential Qualities of TKU Students	Description
<input type="checkbox"/> global perspectives	翻譯建構中
<input checked="" type="checkbox"/> a vision for the future	
<input checked="" type="checkbox"/> information literacy	
<input type="checkbox"/> ethical and moral principles	
<input checked="" type="checkbox"/> independent thinking	
<input type="checkbox"/> an awareness of healthy living	
<input checked="" type="checkbox"/> effective teamwork	
<input type="checkbox"/> an appreciation of the arts	

#### Course Schedule

Week	Date	Subject/Topics	Note
1	2/21	Introduction to the course	
2	2/28	National Holiday (Campus Closed)	
3	3/7	Information Behavior of Scientist and Engineers	
4	3/14	Information Needs of University Students Studying Science and Technology	
5	3/21	Sci-Tech Library and Innovative Information Services	
6	3/28	Issues in Science and Technology Librarianship (1)	
7	4/4	National Holiday (Campus Closed)	
8	4/11	Issues in Science and Technology Librarianship (2)	
9	4/18	Issues in Science and Technology Librarianship (3)	
10	4/25	Midterm Exam Week	
11	5/2	Group Final Presentations (1)	
12	5/9	Group Final Presentations (2)	
13	5/16	Group Final Presentations (3)	
14	5/23	Wrap up	
15	5/30	Final Exam Week	
16			
17			

18		
Requirement		
Teaching Facility	<input checked="" type="checkbox"/> Computer <input type="checkbox"/> Overhead Projector <input type="checkbox"/> Other ( _____ )	
Textbook(s)	There is no required textbook for this course. Readings will be assigned in class.	
Suggested Readings		
Number of Assignment(s)	(Filled in only for those courses that apply)	
Grading Policy		
Note	This syllabus may be uploaded at the website of Course Syllabus Management System at <a href="http://info.ais.tku.edu.tw/csp">http://info.ais.tku.edu.tw/csp</a> or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at <a href="http://www.acad.tku.edu.tw/index.asp">http://www.acad.tku.edu.tw/index.asp</a> . <b>※Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</b>	

Form No. : ATRX-Q03-001-FM201-05