

Tamkang University Academic Year 110, 2nd Semester Course Syllabus

Course Title	BASIC TRAINING OF DIGITAL CONTENT PRODUCTION	Instructor	YI-LUNG LIN
Course Class	TDTXB2A DEPARTMENT OF EDUCATIONAL TECHNOLOGY, 2A	Details	◆ General Course ◆ Selective ◆ One Semester
Relevance to SDGs	SDG4 Quality education		
D e p a r t m e n t a l A i m o f E d u c a t i o n			
The department of educational technology aims to equip students with skills in integrating relevant pedagogical theories into e-Learning, instructional materials development, and project management.			
Subject Departmental core competences			
C. Students will be able to develop multiple types of digital materials.(ratio:60.00) D. Students will be able to acquire the ability related to basic computer programming. (ratio:30.00) F. Students will be able to evaluate each type of digital materials.(ratio:10.00)			
Subject Schoolwide essential virtues			
2. Information literacy. (ratio:50.00) 5. Independent thinking. (ratio:50.00)			
Course Introduction	Promote the implementation of Maker education and practical interactive learning device: the course content is combined with Maker digital tools (laser cutting machine, 3D printer or Arduino board and sensors) for interactive learning device planning, design and production. The course implements digital learning devices by Display technology. Through exhibitions, learners can present and promote their works.Refer to shorturl.at/bqvLU		

The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

- I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.
- II. Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.
- III. Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	It is used to certify the operation of digital tools for Makers, and test the completeness of each learner's operating equipment skills.	Psychomotor
2	To explain the programming of the development version and the sensor and provide learners with repeated practice mechanisms.	Psychomotor
3	Teaching uses the ability to solve complex problems, critical thinking skills, creativity, communication skills and teamwork skills. Group discussions are conducted to discuss the design of the visually impaired interactive learning device.	Cognitive
4	Enhance the value and belief in BASIC TRAINING OF DIGITAL CONTENT PRODUCTION	Affective

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	CDF	25	Discussion, Publication, Experience	Testing
2	CDF	25	Publication, Practicum	Testing, Discussion(including classroom and online)
3	CDF	25	Publication, Experience	Testing
4	CDF	25	Publication, Practicum	Discussion(including classroom and online), Report(including oral and written)

Course Schedule

Week	Date	Course Contents	Note
1	111/02/21 ~ 111/02/25	Maker education and digital tools introduction	
2	111/02/28 ~ 111/03/04	Digital interactive device and display technology(exhibition site visit)	

3	111/03/07 ~ 111/03/11	Laser cutting machine operation and design of digital interactive device I	
4	111/03/14 ~ 111/03/18	Laser cutting machine operation and design of digital interactive device 2	
5	111/03/21 ~ 111/03/25	3D printer machine operation and design of digital interactive device I	
6	111/03/28 ~ 111/04/01	3D printer machine operation and design of digital interactive device II	
7	111/04/04 ~ 111/04/08	No Class	
8	111/04/11 ~ 111/04/15	Discussion of digital interactive device design and planning	
9	111/04/18 ~ 111/04/22	Curation I of Digital Interactive Device	
10	111/04/25 ~ 111/04/29	Midterm Exam Week	
11	111/05/02 ~ 111/05/06	1. Know the development version and the sensor 2. Development version and sensor in education application 3. Basic concepts of electronics	
12	111/05/09 ~ 111/05/13	1. Button interactive project 2. RFID sensor project	
13	111/05/16 ~ 111/05/20	1. Infrared sensor project 2 Ultrasonic Sensor Project	
14	111/05/23 ~ 111/05/27	1. Servo motor project 2. Buzzer/Voice Player Project	
15	111/05/30 ~ 111/06/03	Discussion of sensor-based digital interactive device design and planning	
16	111/06/06 ~ 111/06/10	Curation II of Digital Interactive Device	
17	111/06/13 ~ 111/06/17	1. Feedback improvement 2. Patent amendment	
18	111/06/20 ~ 111/06/24	Final Exam Week	

Requirement	<p>1. Absenteeism is subject to the teacher's call, and failure to call will be regarded as an absence.</p> <p>2. Students applying for leave must go through the procedures for applying for leave in accordance with the rules for applying for leave. After applying for leave, they must apply for leave with the official school leave slip within two weeks. Failure to comply with the regulations will be regarded as absenteeism.</p> <p>3. A total of 5 points will be deducted for the first time of absenteeism. In addition, the test will be deducted for more than three times before the mid-term exam, and five times before the final exam. The semester score of the subject will be calculated as zero.</p> <p>4. The teacher reserves the right to change the assignment items, assignment content, and assignment grading ratio.</p> <p>5. Observe the basic etiquette in the classroom</p> <p>6. Please do not submit late work and final report</p> <p>7. Do not plagiarize the content of the work. Please respect the intellectual property rights of the pictures and texts.</p> <p>8. Interactive discussion, do not abuse and personal attacks.</p>
Teaching Facility	Computer, Projector
Textbooks and Teaching Materials	Refer to https://drive.google.com/drive/folders/1BzQHMEoF5-AutjDlsLWK9czpNVFLV00K?usp=sharing
References	Refer to https://drive.google.com/drive/folders/1BzQHMEoF5-AutjDlsLWK9czpNVFLV00K?usp=sharing
Number of Assignment(s)	6 (Filled in by assignment instructor only)
Grading Policy	<p>◆ Attendance : 30.0 % ◆ Mark of Usual : 30.0 % ◆ Midterm Exam : %</p> <p>◆ Final Exam : 20.0 %</p> <p>◆ Other (Curation I) : 20.0 %</p>
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php.</p> <p>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>