

Course Syllabus and Lesson Plan

RSRS530 Assistive Technology Principle 3 (3-0-6)

Academic Year 2018

Course Title: Assistive Technology Principle

Course Code: RSRS530

Duration: First semester

Pre-Requisite: No

Course Homepage: http://www.rs.mahidol.ac.th/academic/master_degree-rehabilitation.html

Course Description:

Definition, type, framework, policy, legislation, health and educational services related to assistive technology; disabled users and application of assistive technology; relationship between assistive technology, universal design and ergonomics; specialists on assistive technology; standard and ethics of professional practices and quality control; information system in assistive technology; research and development of assistive technology

ความหมาย ประเภท กรอบการทำงาน นโยบายและกฎหมาย บริการทางสุขภาพและบริการทางการศึกษาที่เกี่ยวข้องกับเทคโนโลยีสิ่งอำนวยความสะดวก คนพิการกับการใช้เทคโนโลยีสิ่งอำนวยความสะดวก ความสัมพันธ์ของเทคโนโลยีสิ่งอำนวยความสะดวกกับการออกแบบที่เป็นสากลและเป็นธรรม และการยศาสตร์ ผู้เชี่ยวชาญด้านเทคโนโลยีสิ่งอำนวยความสะดวก มาตรฐานและจริยธรรมในการปฏิบัติและการควบคุมคุณภาพ ระบบสารสนเทศด้านเทคโนโลยีสิ่งอำนวยความสะดวก การวิจัยและพัฒนาเทคโนโลยีสิ่งอำนวยความสะดวก

Course Objectives: At the end of this course, the students will be able to

1. Explain principle of assistive technology for persons with disabilities
2. Explain principle, role, function, job criteria and ethic of assistive technology professional and quality control in assistive technology service
3. Analyze and recommend the assistive technology for persons with disabilities
4. Integrate law, policy, role and function related to the assistive technology

Course Outlines:

Week	Topics	Teaching time			กิจกรรมการเรียน การสอน และสื่อที่ใช้	อาจารย์ผู้สอน
		Lecture	Practice	SDL		
1	Introduction course Principle of Assistive Technology (HAAT model)	3	0	6	Lecture, Discussion, Assignment	Asst. Prof. Warin
2	Activity, Human and Context: The Human Doing and Activity in Context	3	0	6	Lecture, Discussion, Assignment, Presentation	Asst. Prof. Warin
3	Law and Policy Related to the Assistive Technology	3	0	6	Lecture, Discussion,	Assoc. Prof. Tavee
4	-Ethical Issues in Assistive Technology -Delivering Assistive Technology Services to the Consumer	3	0	6	Lecture, Discussion, Assignment, Presentation	Asst. Prof. Warin
5	Making the Connection: User Inputs for Assistive Technologies	3	0	6	Lecture, Discussion, Assignment, Presentation	Asst. Prof. Warin

6	Control Interfaces for Assistive Technologies	3	0	6	Lecture, Discussion, Assignment, Presentation	Asst. Prof. Warin
7	Accessing Mainstream Information and Communication Technologies: The Technology and the Web	3	0	6	Lecture, Discussion	Asst. Prof. Warin
8	สอบกลางภาค					ผศ.ดร.ภก.วรินทร์
9	Enabling Function and Participation with Seating Technologies	3	0	6	Lecture, Discussion	Asst. Prof. Warin
10	Technologies that Enable Mobility	3	0	6	Lecture, Discussion	Asst. Prof. Warin
11	Technologies That Aids Transportation	3	0	6	Lecture, Discussion	Asst. Prof. Warin
12	Technologies that Aid Manipulation and Control of Environment	3	0	6	Lecture, Discussion	Asst. Prof. Warin
13	Sensory Aids for Persons with Visual and Auditory Impairment	3	0	6	Lecture, Discussion	Asst. Prof. Warin

14	Assistive Technologies for Cognitive Augmentation	3	0	6	Lecture, Discussion, Assignment, Presentation	Asst. Prof. Warin
15	Augmentative and Alternative Communication System	3	0	6	Discussion, Assignment, Presentation	Asst. Prof. Warin
16	Role of Assistive Technology Professional (ATP)	3	0	6	Lecture, Discussion	Lect. Alisa
17	Final Examination					Asst. Prof. Warin
Total (Hours)		45	0	60		

Teaching Methods: Lecture, Presentation, Assignment and Discussion

Evaluation of Student Achievement Grading system:

Course Objectives	Evaluations	Marks
1. Explain principle of assistive technology for persons with disabilities	Presentation	5
	Report or Assignment	5
	Knowledge	10
	Analysis	10
		30

Course Objectives	Evaluations	Marks	
2. Explain principle, role, function, job criteria and ethic of assistive technology professional and quality control in assistive technology service	Presentation	1	20
	Report or Assignment	1	
	Knowledge	9	
	Analysis	9	
3. Analyze and recommend the assistive technology for persons with disabilities	Presentation	5	30
	Report or Assignment	5	
	Knowledge	10	
	Analysis	10	
4. Integrate law, policy, role and function related to the assistive technology	Presentation	1	20
	Report or Assignment	1	
	Knowledge	9	
	Analysis	9	
Total			100

A = 80-100 Marks

B+ = 75-79 Marks

B = 70-74 Marks

C+ = 65-69 Marks

C = 60-64 Marks

D+ = 55-59 Marks

D = 50-54 Marks

F < 50 Marks

Course Evaluation: Questionnaire about contents, teaching processes, examinations and instructor performance.

Required Textbook

- Albert M. Cook, Janice M Polgar (2015). "Assistive technologies: principles and practice"
Fourth edition. United States of America. Elsevier

Other References

- Follow the instruction of lecture in each topic

Course Coordinators

Assist. Prof. Dr. Warin Krityakiarana

Department of Rehabilitation for Persons with Disabilities, Ratchasuda College, Mahidol
University

Email: warin.kri@mahidol.ac.th