

Tsuyama College		Year	2021		Course Title	Wellbeing Science and Assistive Technology
Course Information						
Course Code	0153		Course Category	Specialized / Elective		
Class Format	Lecture		Credits	Academic Credit: 2		
Department	Department of Integrated Science and Technology Electrical and Electronic Systems Program		Student Grade	5th		
Term	First Semester		Classes per Week	2		
Textbook and/or Teaching Materials	Textbooks:Japanese Society for Wellbeing Science and Assistive Technology、 The Rehabilitation Engineering Society of JAPAN , "Wellbeing Science and Assistive Technology"(Korona Publishing co. ltd.)					
Instructor	YABUKI Noboru					
Course Objectives						
Learning purposes : Understand the basic principles of life support engineering, and explain the technology and environment required for support in daily life situations.						
Course Objectives : 1. Understand the basic principles of life support engineering. 2. The student can explain the basic concept of equipment design and environment maintenance. 3. The student can explain what is needed for support in each life situation, such as activities of daily living and communication.						
Rubric						
	Excellent	Good	Acceptable	Not acceptable		
Achievement 1	The student can use the basic philosophy of life support engineering.	The student can explain the basic philosophy of life support engineering.	The student can understand the basic philosophy of life support engineering(test).	The student can 't understand the basic philosophy of life support engineering.		
Achievement 2	The student can use the basic concept of equipment design and environment maintenance.	The student can explain the basic concept of equipment design and environment maintenance.	The student can understand the basic concept of equipment design and environment maintenance(test).	The student can't understand the basic concept of equipment design and environment maintenance.		
Achievement 3	The student can explain what is needed for support in each life situation, such as activities of daily living and communication ,and can think about applications.	The student can explain what is needed for support in each life situation, such as activities of daily living and communication.	The student can understand what is needed for support in each life situation, such as activities of daily living and communication(test).	The student can't understand what is needed for support in each life situation, such as activities of daily living and communication.		
Assigned Department Objectives						
Teaching Method						
Outline	General or Specialized : Specialized Field of learning : Interdisciplinary subjects/etc.(Medical and social welfare Program) Foundational academic disciplines : Biomedical engineering and related fields / Medical assistive technology-related Relationship with Educational Objectives : This class is equivalent to "(4) Develop multi-disciplinary ability" Relationship with JABEE programs : The main goal of learning / education in this class is "(A)... A-1..." Course outline : In this class, it is the life support technology based on human resources and welfare equipment that will support the elderly and disabled in the future. In this course, the student will learn the basic matters necessary for independence support and long-term care support for the elderly and disabled, as well as technology and environment improvement to support living and employment.					
Style	Course method : Classes will be centered around writing on the board. The Student will proceed with the lessons while solving exercises as appropriate in order to deepen their understanding. In addition, reports and issues will be given according to the situation. (This class is a semi-annual subject) Grade evaluation method : Examination(70%)+Exercises and report assignments (30%). Examinations will be conducted a total of 2 times, and the evaluation ratios will be the same. ・ Each test does not allow notebooks to be brought in. ・ For those who have less than 60 points in each regular test, supplementary lessons will be given, and if the understanding can be confirmed by the retest, the points may be changed. However, the evaluation after the change shall not exceed 60 points.					

Notice	<p>Precautions on the enrollment : Students must take this class (no more than one-third of the required number of class hours missed) in order to complete the 5th year course. This is a class that requires study outside of class hours. A total of 45 hours of study is required per credit, including both class time and study outside class time. Follow the instructions of the instructor regarding study outside of class hours.</p> <p>Course advice : As a preparatory study, students should research examples of life support in medical welfare. Foundational subjects : Subjects learned so far.</p> <p>Related subjects : Medical and Welfare Engineering(5th), Ergonomics(5th), Psychology for Human Services(5th), Welfare Equipment Design(5th), Biological Information Processing(5th), Biomeasurement Engineering(5th), Wellbeing Science and Assistive Technology(5th), Etc.</p> <p>Attendance advice : The student must make preparations / reviews and work on assignments outside of class hours and submit a report. If you do not understand the content of the lesson, ask the teacher. Late arrivals of 25 minutes or more are treated as one absence, and late arrivals of 75 minutes or more are treated as two absences.</p>
--------	--

Characteristics of Class / Division in Learning

<input type="checkbox"/> Active Learning	<input type="checkbox"/> Aided by ICT	<input checked="" type="checkbox"/> Applicable to Remote Class	<input type="checkbox"/> Instructor Professionally Experienced
--	---------------------------------------	--	--

E l e c t i v e m u s t c o m p l e t e s u b j e c t s

Course Plan

			Theme	Goals
1st Semester	1st Quarter	1st	Not offered this year Guidance, Concepts of Life Support Engineering (1)	To confirm the class plan. To understand the definition of life support engineering.
		2nd	Concept of life support engineering (2)	To understand the concept of life support engineering
		3rd	Concept of disability (1)	Understand the definition of disability.
		4th	Concept of disability (2)	To understand the actual situation of people with disabilities.
		5th	Support for daily life using assistive devices (1)	Understanding the points of using assistive devices and support for daily life activities.
		6th	Support for daily life using assistive devices (2)	Understanding support for posture maintenance and mobility.
		7th	Various types of support (1)	To understand support for communication and equipment operation.
		8th	(First semester midterm exam)	To confirm the contents of the study up to this point.
	2nd Quarter	9th	Return of mid-term exam and explanation of answers, various types of support (3)	Confirmation and remediation of areas of insufficient learning. Understand how to support information gathering and dissemination.
		10th	Support (3)	Understanding support for cognitive disabilities.
		11th	Accessible design (1)	To understand the outline of accessible design.
		12th	Accessible design (2)	To understand the points to make accessible design.
		13th	Human-friendly living environment (1)	Understanding the living environment.
		14th	Human-friendly living environment (1)	Understanding the urban environment.
		15th	(End of semester exam)	Confirm the contents of study.
		16th	Return of answers to the final exam and explanation of the exam	Confirmation and remediation of areas of insufficient learning. Understand how to support information gathering and dissemination.

Evaluation Method and Weight (%)

	Examination	Exercise / report assignment	Total
Subtotal	70	30	100
Basic Proficiency	0	0	0
Specialized Proficiency	70	30	100
Cross Area Proficiency	0	0	0