



Information about the subject

Degree: Bachelor of Science Degree in Speech and Language Therapy

Faculty: Faculty of Psychology

Code: 1170301 **Name:** Alternative Communication

Credits: 6,00 **ECTS Year:** 3 **Semester:** 1

Module: Impairments, disorders and speech and language intervention

Subject Matter: Alternative Communication **Type:** Compulsory

Field of knowledge: Speech and Language Therapy

Department: Speech Therapy

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

1173A Alberto Pascual Soriano (**Profesor responsable**)

alberto.pascual@ucv.es

Carlos Mañez Carvajal

carlos.manez@ucv.es

Nerea Gascon Herranz

nerea.gascon@ucv.es



Module organization

Impairments, disorders and speech and language intervention

Subject Matter	ECTS	Subject	ECTS	Year/semester
Language pathology	18,00	Language Pathologies I	6,00	1/1
		Language Pathologies II	6,00	1/2
		Learning difficulties	6,00	2/2
Deficit in the basic tools for the reception and production of language	24,00	Speech and language intervention in hearing deficiencies	6,00	3/1
		Speech and language intervention in voice disorders	6,00	3/1
		Speech Therapy Intervention in Speech Disorders	6,00	3/1
		Speech Therapy Intervention in Swallowing Disorders and Orofacial Alterations	6,00	3/2
Neuro-psycho-linguistic disorders	18,00	Speech and language intervention in aphasia and related disorders	6,00	3/2
		Speech and language intervention in specific disorders of language development	6,00	2/2



Neuro-psycho-linguistic disorders		Speech Therapy Intervention in Autism Spectrum Disorders and Intellectual Disability	6,00	3/2
Fluency Disorders	6,00	Speech Therapy Intervention in Stuttering	6,00	3/1
Alternative Communication	6,00	Alternative Communication	6,00	3/1

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 To know, explain and know how to select the most appropriate alternative communication system according to the needs and communication possibilities of the user.
- R2 To know and be initiated in the handling of the technical aids (AATT) most used in alternative communication (CA).
- R3 To know and use communication systems with and without help.
- R4 To design and produce dynamic communication dashboards emulated with free distribution software.
- R5 To know and know how to apply the teaching and learning techniques of alternative communication systems.



Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

SPECIFIC	Weighting			
	1	2	3	4
CE8 To evaluate language alterations in specific language developmental disorders: specific developmental language disorders, specific language disorders, language delays, phonetic and phonological disorders; communication and language disorders associated with auditory and visual deficits, attention deficit, mental impairment, pervasive developmental disorder, autism spectrum disorders, infantile cerebral palsy and multiple impairments; specific written language disorders; dyscalculias; alterations in language development due to social deprivation and those associated with multicultural and multilingual contexts; disorders of speech fluency; aphasia and associated disorders; dysarthria; dysphonia; dysglosia; alterations of language in ageing and degenerative disorders; alterations of language and communication in mental illnesses; mutism and language inhibitions; alterations of non-verbal oral functions: atypical swallowing, dysphagia and tubal alterations.				X
CE10 To carry out an evaluation after the intervention.			X	
CE13 Knowing the general principles of speech therapy intervention			X	
CE14 Understand the functions of speech therapy intervention: prevention, education, retraining, rehabilitation and treatment	X			
CE15 Know and apply models and intervention techniques				X
CE19 Understand and implement Augmentative Communication Systems				X
CE20 Understand and implement technical aids to communication			X	
CE22 Know how to design, develop and evaluate the performance of speech therapy				X
CE27 Perform strategic planning for speech therapy intervention		X		



CE32	Using information technology and communication			X	
CE38	To design and carry out speech therapy treatments, both individual and collective, establishing objectives and stages, with the most effective and appropriate methods, techniques and resources, and taking into account the different evolutionary stages of the human being.	X			
CE39	Select, implement and facilitate the learning of augmentative communication systems and the design and use of prostheses and the technical aids necessary adapted to the physical, psychological and social needs of patients				X
CE40	Advise families and the social context of patients, encouraging their participation and collaboration in speech therapy treatment	X			
CE43	Knowing the limits of competencies and knowing when interdisciplinary treatment is necessary			X	
CE44	Explain and support the selected treatment				X
CE54	Manage communication technologies and information			X	

TRANSVERSAL		Weighting			
		1	2	3	4
CT1	Use the techniques of verbal and nonverbal communication in order to optimize relevant communicative situations			X	
CT2	Critically evaluate own job performance and that of other professionals to improve results		X		
CT3	Have the flexibility to work within teams integrated by other professionals belonging to the same field			X	
CT5	Recognize, analyze and obtain solutions to ethical problems in professional practice situations				X
CT6	Adapt to new situations arising in their profession			X	
CT7	Having an open and flexible attitude to lifelong learning			X	
CT8	Know and use of technical advances in the exercise of their profession				X



Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
	70,00%	Oral and/or written tests: exams, reports, resolution of internships.
	10,00%	Attendance, participation, continued work.
	10,00%	Performance and/or presentation of individual theoretical and practical activities.
	10,00%	Performance and/or presentation of theoretical and practical group activities.

Observations

Minimum Attendance Requirement

To pass the course through the standard assessment modality, a minimum attendance of 40% to in-person sessions is required.

Assessment

There are two types of assessment: standard and single (alternative).

a) Standard assessment

To pass the course through the standard assessment modality, students must attend at least 40% of the in-person sessions.

Assessment components:

- Oral and/or written tests (70%): exams, reports, practical exercises.
- Attendance, active participation, and engagement in learning activities (10%)
- Completion and/or presentation of individual theoretical-practical activities (10%): Reports, assignments, testing applications, data analysis, or other results derived from practical sessions.
- Completion and/or presentation of group-based theoretical-practical activities (10%)

To pass the course, students must individually pass each assessment component.

b) Single (alternative) assessment

The single assessment modality is an exceptional option for students who, due to duly justified and documented reasons, cannot meet the minimum attendance requirement. This option must be requested in writing by the student to the course instructor and will be answered through the same means.

Assessment components:

- Oral and/or written tests (70%): exams, reports, practical exercises.
- Individual practical work (30%): Evaluation of reports, assignments, test applications, data



analysis, or other outcomes derived from additional tasks reasonably designed to substitute face-to-face training activities, demonstrating achievement of all learning outcomes defined for the course.

Both components must be passed independently to successfully complete the course under this modality.

AI Use and Attribution Criteria

Any use of AI tools must be explicitly declared in the submitted document (e.g., in a footnote or appendix). The student must indicate the name of the tool, the purpose of use (e.g., grammar correction, idea organization, writing example), and which part of the work involved its use. Responsible use of AI will be evaluated as part of the originality and academic honesty criteria.

Criteria for Awarding "Matrícula de Honor" (Honors Distinction)

The grade of "Matrícula de Honor" (MH) will be awarded to students who obtain a final grade equal to or greater than 9.5, and who demonstrate excellence in all assessment components. This award is subject to the maximum limit established by university regulations: one per every 20 students (or fraction thereof), and only one MH in groups of fewer than 20 students.

In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded.

Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- M1 Participative lectures: strategies focused on the transmission of information from teachers to students. Student participation is promoted with hybrid methodologies, in order to consolidate knowledge and encourage critical thinking.
- M2 Practical Class. Classroom practice, laboratory practice and/or simulations: methodologies based on student interaction with problems, technologies, samples or analysis equipment, in order to incorporate experimentation to knowledge.



- M3 Case studies and analysis of clinical histories: students build knowledge from information on cases provided to them. In addition to providing the material, the teacher acts as a guide in the search for the solution.
- M6 Service-Learning: methodology that merges the learning process of students with the intention of providing a real and solidary service in society. Students participate in the selection of objectives and design of actions. Teachers act as guides to develop knowledge in the process.



IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
THEORETICAL CLASSES. Lectures, expository and participative classes. They focus on the approach, analysis and development of competences: explanation and orientation towards the acquisition of the necessary knowledge, instruction in the derived skills and acquisition of professional aptitudes. M1	R1, R2, R3, R4, R5	20,00	0,80
PRACTICAL CLASSES. Individual or group work sessions supervised by the teacher. Analysis of materials related to the subjects: reports, statistics, scientific literature, tests and evaluation tests, problem solving, visualization of clinical histories, simulation of cases, etc. M2	R2, R3, R4	15,00	0,60
LABORATORY PRACTICES: Laboratory activities for obtaining, analyzing and interpreting samples. Learning of measurement techniques by means of instruments. Learning of safety measures. M2	R3, R4	18,00	0,72
TUTORIALS: Individual or small group meetings to personalize any aspect of the teaching-learning process M6	R1, R2, R3, R4	6,00	0,24
EVALUATION: Set of tests in oral, written, or other audiovisual media. It includes the final exams (exams and presentation of work) and all the elements of continuous evaluation that contribute in a weighted way to the final grade (presentation of work, scheduled activities, questionnaires, etc.) The public presentation of the Final Degree Project is included. M1	R1, R2, R3, R4	1,00	0,04
TOTAL		60,00	2,40



LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
GROUP WORK: Group preparation of readings, essays, problem solving, seminars, papers, reports, etc. to be presented or delivered in theory classes, practical classes or small group tutorials. M2	R1, R2, R3, R5	30,00	1,20
AUTONOMOUS WORK: Personal study of the student. Individual preparation of readings, essays, problem solving, seminar material, papers, reports, etc. to present or deliver in class, complete their training activity and prepare their evaluation tests. M3	R3, R4, R5	60,00	2,40
TOTAL		90,00	3,60



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
Topic 1: Introduction to Augmentative and Alternative Communication Systems (AAC)	Types of signs. Definition and basic concepts. Classification of AAC systems. Users or potential users of AAC: an initial overview. Implementation of AAC systems: a socio-historical perspective. Advantages and disadvantages of using AAC.
Topic 2: Aided Augmentative and Alternative Communication Systems (AAC)	Introduction, definition, and classifications. Systems based on highly representative elements, line drawings, systems combining pictographic, ideographic, and linear symbols, systems based on traditional spelling, and coded word systems.
Topic 3: Assistive Products (AP)	Concept, characteristics, classification, institutions, and intervention team.
Topic 4: Unaided AAC Systems	Introduction, definition, and classification. The sign language of the hearing-impaired: Spanish Sign Language (LSE). Pedagogical sign systems.
Topic 5: Assessment and Decision-Making	Phases and tools.
Topic 6: Learning Strategies	Initial strategies. Expansion and generalization of vocabulary.



Temporary organization of learning:

Block of content	Number of sessions	Hours
Topic 1: Introduction to Augmentative and Alternative Communication Systems (AAC)	4,00	8,00
Topic 2: Aided Augmentative and Alternative Communication Systems (AAC)	7,00	14,00
Topic 3: Assistive Products (AP)	6,00	12,00
Topic 4: Unaided AAC Systems	7,00	14,00
Topic 5: Assessment and Decision-Making	3,00	6,00
Topic 6: Learning Strategies	3,00	6,00



References

Required Readings

- Abril, D., Delgado-Santos, C. I., & Sebastián, M. (2012). *Mi interfaz de acceso*. CEAPAT-IMSERSO.
- ARASAAC - Gobierno de Aragón. (2022). *AAC Symbols and shared resources—ARASAAC*.
<https://arasaac.org/>
- Beukelman, D. R., & Light, J. C. (2020). *Augmentative & alternative communication: Supporting children and adults with complex communication needs* (5th ed.). Brookes Publishing.
- Delgado-Santos, C. I. (2012a). *Mi comunicador de pictogramas*. CEAPAT-IMSERSO.
- Delgado-Santos, C. I. (2012b). *Mi software de comunicación*. CEAPAT-IMSERSO.
- Delgado-Santos, C. I., & Pérez-Castilla, L. (2015). *Apps gratuitas para el entrenamiento cognitivo y la comunicación*. CEAPAT-IMSERSO.
- Monfort, M., Juárez Sánchez, A., & Monfort Juárez, I. (2006). *La práctica de la comunicación bimodal: Del signo a la palabra* (1.ª ed.). Entha.
- Warrick, A. (1998). *Comunicación sin habla: Comunicación aumentativa y alternativa alrededor del mundo* (C. E. A. P. A. T., Ed.). Sociedad Española de Comunicación Aumentativa y Alternativa (ISAAC-España).
<http://www.ceapat.es/InterPresent1/groups/imsero/documents/binario/ceapatisaacserie1.pdf>

Basic References

- Abril, D., Delgado-Santos, C. I., & Vigara, A. (2010). *Comunicación aumentativa y alternativa: Guía de referencia* (3.ª ed.). CEAPAT.
- Allen, A. A., Schlosser, R. W., Brock, K. L., & Shane, H. C. (2017). The effectiveness of aided augmented input techniques for persons with developmental disabilities: A systematic review. *Augmentative and Alternative Communication*, 33(3), 149–159.
- Angermeier, K., Schlosser, R. W., Luiselli, J. K., Harrington, C., & Carter, B. (2008). Effects of iconicity on requesting with the Picture Exchange Communication System in children with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 2(3), 430–446.
- Basil, C. (1992). Social interaction and learned helplessness in severely disabled children. *Augmentative and Alternative Communication*, 8(3), 188–199.
- Basil, C. (2014). Sistemas aumentativos y alternativos de comunicación. En J. Peña-Casanova (Ed.), *Manual de logopedia* (pp. 379–390). Elsevier Masson.
- Biggs, E. E., Carter, E. W., & Gilson, C. B. (2019). A scoping review of the involvement of children's communication partners in aided augmentative and alternative communication modeling interventions. *American Journal of Speech-Language Pathology*, 28(2), 743–758.
https://doi.org/10.1044/2018_AJSLP-18-0024
- Coronas, M., & Basil, C. (2013). Comunicación aumentativa y alternativa para personas con afasia. *Revista de Logopedia, Foniatría y Audiología*, 33(3), 126–135.
- Delgado, C. (2009). Historia y evolución de la comunicación aumentativa en España. *CEAPAT*, 60, 8–10.



Espada Chavarría, R., Moreno Rodríguez, R., & Morán Montalvo, M. (2020). Educación inclusiva y TIC: Sistemas de barrido ocular para alumnado con parálisis cerebral en Educación Primaria. *Ensayos. Revista de la Facultad de Educación de Albacete*, 35(2), 171–190.

<https://doi.org/10.18239/ensayos.v35i2.2551>

Finke, E. H., et al. (2017). Effects of a least-to-most prompting procedure on multisymbol message production in children with autism spectrum disorder. *American Journal of Speech-Language Pathology*, 26(1), 81–98. https://doi.org/10.1044/2016_ajslp-14-0187

Ganz, J. B., et al. (2017). High-technology augmentative and alternative communication for individuals with intellectual and developmental disabilities and complex communication needs: A meta-analysis. *Augmentative and Alternative Communication*, 33(4), 224–238.

Grove, N., & Walker, M. (1990). The Makaton vocabulary: Using manual signs and graphic symbols to develop interpersonal communication. *Augmentative and Alternative Communication*, 6(1), 15–28. <https://doi.org/10.1080/07434619012331275284>

Lloréns Macián, B. (2000). *Introducción y enseñanza del sistema Minspeak de comunicación aumentativa*. Guía para el profesional.

Monfort, M., Rojo, A., & Juárez, A. (2010). *Programa elemental de comunicación bimodal* (12.^a ed.). CEPE.

O'Neill, T., Light, J., & Pope, L. (2018). Effects of interventions that include aided AAC input on the communication of individuals with complex needs: A meta-analysis. *Journal of Speech, Language, and Hearing Research*, 61(7), 1743–1765.

Schaeffer, B., Raphael, A., & Kollinzas, G. (2005). *Habla signada para alumnos no verbales*. Alianza Editorial.

Sotillo, M. (Coord.). (1993). *Sistemas alternativos de comunicación*. Editorial Trotta.

Soto, F. J., & Alcantud, F. (Coords.). (2003). *Tecnologías de ayuda en personas con trastornos de comunicación*. Nau Llibres.

Tetzchner, S. von, Basil, C., & Martinsen, H. (1993). *Introducción a la enseñanza de signos y al uso de ayudas técnicas para la comunicación*. A. Machado Libros.

Torres Monreal, S. (Coord.). (1995). *Sistemas alternativos de comunicación: Manual de comunicación aumentativa y alternativa: sistemas y estrategias*. Aljibe.

Additional References

Alcantud Marín, F., & Soto Pérez, F. J. (2003). *Tecnologías de ayuda en personas con trastornos de comunicación*. Nau Llibres.

Basil Almirall, C., & Puig De La Bellacasa, R. (1988). *Comunicación aumentativa: Curso sobre sistemas y ayudas técnicas de comunicación no vocal*. INSERSO.

Basil Almirall, C., Soro-Camats, E., & Rosell Bultó, C. (1998). *Sistemas de signos y ayudas técnicas para la comunicación aumentativa y la escritura*. Masson.

Candelas Arnao, A., & Galindo, M. L. (1996). *Guía de acceso al ordenador para personas con discapacidad*. CEAPAT.

Coronas, M. (2017). Sistemas aumentativos y alternativos para personas con parálisis cerebral. En M. Puyuelo et al. *La parálisis cerebral. Diagnóstico e intervención logopédica* (pp. 229–264). EOS.



- Cress, C. J., & Marvin, C. A. (2003). Common questions about AAC services in early intervention. *Augmentative and Alternative Communication*, 19, 254–272.
<https://doi.org/10.1080/07434610310001598242>
- Gómez Taibo, M. L., & García-Eligio de la Puente, M. T. (2016). Una revisión sobre el input de la comunicación aumentativa asistida en personas con trastornos del desarrollo. *Revista de Logopedia, Foniatría y Audiología*, 36(1), 23–35. <https://doi.org/10.1016/j.rlfa.2015.03.001>
- Gómez Taibo, M. L. (2020). *Comunicación simbólica: Comunicación aumentativa y alternativa*. Pirámide.
- Johnston, S. S., et al. (2012). *AAC strategies for individuals with moderate to severe disabilities*. Brookes Publishing.
- Jones-Wohleber, T. (2017). *Model as a master pal*.
https://drive.google.com/drive/u/0/folders/1XmXMhsDzSyyb5KHBw-pZFY_0KP1eJfFJ
- Jorgensen, C. (2005). The least dangerous assumption: A challenge to create a new paradigm. *Disability Solutions*, 6(3), 2–15.
- Kent-Walsh, J., Binger, C., & Hasham, Z. (2010). Effects of parent instruction on symbolic communication in children using AAC during storybook reading. *American Journal of Speech-Language Pathology*, 19(2), 97–107. [https://doi.org/10.1044/1058-0360\(2010/09-0014\)](https://doi.org/10.1044/1058-0360(2010/09-0014))
- Kent-Walsh, J., Binger, C., & Buchanan, C. (2015). Teaching children using AAC to ask inverted yes/no questions. *American Journal of Speech-Language Pathology*, 24(2), 222–236.
https://doi.org/10.1044/2015_AJSLP-14-0066
- Light, J., & McNaughton, D. (2012). Supporting the communication, language, and literacy development of children with complex communication needs. *Assistive Technology*, 24(1), 34–44.
- Marchesi, A. (2003). *El desarrollo cognitivo y lingüístico de los niños sordos*. Alianza Editorial.
- Mirenda, P., & Iacono, T. (2009). *Autism spectrum disorders and AAC*. Brookes Publishing.
- Monfort, M. (2006). La comunicación bimodal: Una ayuda para el desarrollo del lenguaje. *Revista Virtual Down* 21.
<https://www.down21.org/revista-virtual/694-revista-virtual-2006/revista-virtual-marzo-2006/articulo-profesional-marzo-2006/2052-la-comunicacion-bimodal-una-ayuda-para-el-desarrollo-del-lenguaje-y-de-la-comunicacion.html>
- Monfort, M., Rojo, A., & Juárez, A. (2018). *Programa elemental de comunicación bimodal* (12.^a ed.). CEPE.
- Müller, E., & Soto, G. (2002). Conversation patterns of adults using aided speech: Variations across partners. *Augmentative and Alternative Communication*, 18(2), 77–90.
- Román, G., Langarika-Rocafort, A., & Idoiaga, N. (2020). Implicaciones para la práctica y la investigación en la comunicación aumentativa y alternativa (pp. 35–49).
- Sancho, E., Rosell, C., Coronas, M., & Soro-Camats, E. (2018). *Comunicació augmentativa en un context escolar inclusiu*. Universitat de Barcelona. <http://hdl.handle.net/2445/125526>
- Soro-Camats, E., & Basil, C. (2006). Desarrollo del lenguaje en niños con discapacidad motora. En M. J. del Río & V. Torrens (Coords.), *Lenguaje y comunicación en trastornos del desarrollo* (pp. 79–104). Pearson.



Suárez Piñero, M., & Gómez Taibo, M. L. (2002). *Comunicación aumentativa y alternativa: Los sistemas alternativos de comunicación*. Fundación Verbum.

Torres Monreal, S., & Ruiz Casas, M. J. (1996). *La palabra complementada: Introducción a la intervención cognitiva en logopedia*. Ciencias de la Educación Preescolar y Especial.

Torres, S., & García-Orza, J. (1997). *Discapacidad y sistemas de comunicación: Teoría y aplicaciones* (3.^a ed.). Real Patronato de Prevención y Atención a Personas con Minusvalía.