

## 1. ASIGNATURA / **COURSE**

### 1.1. Nombre / **Course Title**

Adquisición de conocimiento / **Knowledge acquisition**

### 1.2. Materia / **Content Area**

Adquisición de conocimiento y Psicología de la Educación / **Knowledge acquisition and Psychology of Education**

### 1.3. Código / **Course Code**

18160

### 1.4. Tipo / **Type of course**

Obligatoria / **Compulsory**

### 1.5. Nivel / **Level of course**

Grado / **Bachelor (first cycle)**

### 1.6. Curso / **Year of course**

Tercero/ **3<sup>rd</sup>**

### 1.7. Semestre / **Semester**

1º / **1<sup>st</sup> (fall semester)**

### 1.8. Número de créditos / **Number of Credits Allocated**

6 CRÉDITOS ECTS / **6 ECTS credits**

### 1.9. Requisitos Previos / **Prerequisites**

Esta asignatura se imparte en **inglés**/ **This course is taught in English**

To be able to opt for the teaching of some subjects of the degree in English, according to the common European framework of reference for languages, the student must have a minimum in that language of B2 or equivalent level. If not, you will have to perform all matters by way of teaching in Spanish, in which the level of English is not a requirement for access to the qualification

It is highly recommended to have conceptual knowledge about elementary learning processes (studied in the subject of Learning and Conditioning) as well as basic cognitive processes (motivation and emotion, perception and attention, memory, language and thinking process, etc.). Assuming the predominantly cognitive approach of the Department of Basic Psychology, the study of these processes shows the important role of knowledge in the cognitive system for the operation of each of these processes. Moreover, it is also assumed that students already have knowledge about various

cognitive proposals, from cognitive theories of development to social-cognitive theories or current information processing.

Other procedural requirements are related to the acquisition of information (for example, know how to search information in appropriate documentary sources), data analysis and research design and procedures for communication of information (knowing how to write a research report or intervention).

### 1.10. ¿Es obligatoria la asistencia? / **Is attendance to class mandatory?**

No, except in the specific activities that will require.

## 2. Datos del profesor/a / profesores / **Faculty Data**

José Antonio León (e-mail: [joseantonio.leon@uam.es](mailto:joseantonio.leon@uam.es))

Office: 412; Module 4

Phone: 91 497 5226

DEPARTMENT OF FUNDAMENTAL PSYCHOLOGY (PSICOLOGÍA BÁSICA)

## 3. Objetivos y competencias/ **Objectives and competences**

### Basic skills:

(CB3) Students have the ability to gather and interpret relevant data (typically within their field of study) for making judgements that include a reflection on issues of social, scientific or ethical nature.

### Specific skills:

(CE8) Acquire the knowledge and skills required to intervene in different contexts and application fields of Psychology (education, clinic and health, work and organizations, community).

(CE10) Identify and interpret the relevant features of the behavior of individuals and groups, their problems and needs.

(CE18) Promote and influence the health, quality of life and well-being of individuals, groups, communities and organizations.

(CE21) Be able to argue a position, by means of a critical attitude and self-criticism.

(CM40) Be able to identify the differences and similarities between the various theoretical perspectives on the process of knowledge acquisition and the educational processes that favor it including its own intuitive designs on it.

(CM42) Be able to analyze or design an intervention and/or research on some component of the process of knowledge acquisition of rigorous and cooperatively with peers.

(CM43) Compare several functions that educational psychologists are going on in society from their professional positions and propose possible changes that will improve their ability to influence the processes of learning and development.

(CM55) Know and understand the various fields of application of the psychology in individuals, groups and organizations and in different contexts.

(CM59) Develop psychological reports in different fields of action, targeted to recipients and other professionals

#### 4. Course contents

##### **Block I: Introduction to the psychology of knowledge.**

Knowledge and its origins: the biological and cultural heritages. The joint evolution of mind and culture.

**Block II: Main approaches theoreticians on human learning and Knowledge acquisition.** How is knowledge acquired? Processes and mechanisms for the acquisition and exchange of knowledge in different contexts. Knowledge Acquisition and Comprehension.

##### **Block III: Analysis and intervention in situations of learning and knowledge acquisition.**

Task analysis applied to psychological intervention in contexts of instruction, training and personal change. Components of a knowledge acquisition situation. This content shall be specified and detailed in each session.

#### 5. Recommended reading

- Aparicio, J.J. & Rodríguez Moneo, M. (2015). *El aprendizaje humano y la memoria. Una visión integrada y su correlato neurofisiológico*. Madrid: Pirámide.
- Arsuaga, J.L. (1999). *El collar del neandertal. En busca de los primeros pensadores*. Madrid: Ediciones Temas de Hoy.
- Blackemore, S-J. & Frith, U. (2005). *Cómo aprende el cerebro*. Barcelona: Ariel, 2006.
- Caro Gabalda, I. (2011). *Hacia una práctica eficaz de las psicoterapias cognitivas. Modelos y técnicas principales*. Bilbao: Desclée de Brouwer.
- Claxton, G. (1984). *Vivir y aprender*. Madrid: Alianza, 1987.
- Claxton, G. (1999). *Aprender. El reto del aprendizaje continuo*. Barcelona. Paidós, 2001.
- Damasio, A. R. (2010). *¿Cómo pudo el cerebro generar emociones, sentimientos, ideas y el yo?* Barcelona: Destino.
- Doidge, N. (2007). *El cerebro se cambia a sí mismo*. Madrid: Aguilar, 2008.
- Fiorella, L., & Mayer, R. E. (2015). *Learning as a generative activity: Eight learning strategies that promote understanding*. New York: Cambridge University Press
- Hattie, J. & Yates, G (2014). *Visible learning and the science of how we learn*. Nilton Park., Ru: Routledge.
- Kaas, J.H. (2002). La evolución del cerebro humano. En R. Adolphs, H. Eichenbaum, J.D. Delius, J.H. Kaas, J. LeDoux, R. Picard y G. Tononi. *Emoción y Conocimiento. La evolución del cerebro y la inteligencia* (pp. 67-84). Barcelona: Tusquets Editores.
- León, J.A. (Comp.) (2003). *Conocimiento y discurso. Claves para inferir y comprender*. Madrid: Pirámide.
- León, J. A. (2004). *Adquisición de conocimiento y comprensión: Origen, evolución y método*. Madrid: Biblioteca Nueva.

- León, J.A. & Escudero, I. (Eds., 2017). Reading comprehension in educational settings. Series of Studies in Written Language and Literacy. London: John Benjamin.
- Mateos, M. (2001). *Metacognición y Educación*. Buenos Aires: Aique.
- Pozo, J. (2014). *Psicología del Aprendizaje Humano: adquisición de conocimiento y cambio personal*. Madrid: Morata.
- Pozo, J.I. (2003). *Adquisición de conocimiento*. Madrid: Morata.
- Pozo, J.I. & Pérez Echeverría, M.P. (Eds.) (2009). *Psicología del aprendizaje universitario: de la adquisición de conocimientos a la formación de competencias*. Madrid: Morata.
- Pinker, S. (1997). *Cómo funciona la mente*. Madrid: Debate, 2001.
- Pinker, S. (2002). *La tabla rasa*. Barcelona: Paidós, 2003.
- Ramachandran. V. S. (2011) *Lo que el cerebro nos dice los misterios de la mente humana al descubierto*. Barcelona: Paidós.
- Rodríguez Moneo, M. (1999). *Conocimiento previo y cambio conceptual*. Buenos Aires: Aique.
- Santi, K.L. & Reed, D. (2015), (Eds.), *Improving Comprehension for Middle and High School Students*. Springer International Publishing Switzerland.
- Sawyer, R.K. (Ed.), (2006). *The Cambridge Handbook of the Learning Sciences*. New York: Cambridge University Press.

Available in the library at the following link:

<http://biblos.uam.es/uhtbin/cgisirsi/y/FILOSOFIA/x/28/5909/X>

## 6. Métodos Docentes / Teaching methods

To achieve the initial goals we will carry out the following activities, though not necessarily in the same order of presentation.

- a) **Master classes** for each of the topics there will be a presentation of the subject, by the teacher or by readings or other materials instructional, contrasting different theoretical models and among them emphasis between the intuitive concepts and the different scientific conceptions.
- b) **Activities of class participation** where it is established, students should read the text corresponding to the topic to deal with the goal of any given activity, questions that guide the reading, realization of concept maps, preparing for a debate in class on any aspect to promote the understanding and reflection of the contents covered in the reading.
- c) **Classroom practices** consist of several activities with the aim of acquiring the procedural learning aimed at interpretation and analysis of a real situation of learning as well as reflection and analysis on the own knowledge through cooperative learning. To do this, students must have completed different activities, established in advance, to discuss in small groups. Then there will be a final discussion with the participation of all groups. The task of the teacher will be help in discussions in small groups and in the management and regulation of the final discussion.
- d) **Seminars of reading and argumentation** about the nature of knowledge and its acquisition. Activities designed in this way are intended to broaden the theoretical perspectives on the nature of human knowledge and its acquisition and promote best strategies for reading psychological texts and critical argumentation.
- e) **Realization of mentored monographs**. The main of this task is students to integrate and apply the content developed on the subject a), well to the design and analysis of an intervention aimed at providing concrete learning; b), well a small investigation to analyze outcomes, processes or conditions involved in learning specific, or c), the completion of field work on specific aspects of a type of learning. The work focuses on the contents of the second part of the course, aimed at the analysis of the processes and conditions involved in explicit learning both conceptual and procedural type. The project is carried out in small groups,

directed and supervised by the teacher. The elaborate works are presented in writing and may expose and discuss with the rest of the classmates at the end of the course

## 7. Tiempo de trabajo del estudiante / Student workload

Activities of the teaching methods	15 weeks		
	Hours contact	Horas no contact	Total hours
Lectures and participation in class activities	38	52	90
Practices/seminars/mentored	15	30	45
Tutorials / other activities	3	4	7
Evaluation	3	5	8
Total hours	<b>59</b>	<b>91</b>	<b>150</b>

## 8. Métodos de Evaluación y Porcentaje en la Calificación Final / Assessment Methods and Percentage in the Final Marks

The evaluation will take into account both the conceptual knowledge as students make use of that knowledge in practical situations, which make clear the acquisition procedures and attitudes consistent with the objectives of the subject also. These types of knowledge will be assessed through different procedures. In general terms these procedures will be on the one hand the test and on the other the ongoing evaluation of the active participation and practical activities during the course. The assessment through written test constitutes 60% of the final mark and conducting practices and specific activities during the remaining 40%.

This group (340) of this subject are registered with PsInvestiga. This system will allow to the student obtain 5% of the final grade of the course through their participation in one or more research (see [www.uam.es/psicologia](http://www.uam.es/psicologia) for details). This activity will be calculated in block practices. If the student opts not to participate in PsInvestiga, it will be guaranteed an alternative activity of similar duration to that the teacher will made in class.

In summary, the following table shows the contribution of each of the procedures of evaluation to the final score.

Criteria of evaluation of the subject.	
ACTIVITIES	PERCENTAGE
<b>Test: evaluation by test written.</b>	60%
<i>Realization of practical during the course, such as</i> <ul style="list-style-type: none"> <li>specific and carrying out activities of classroom,</li> <li>practical activities,</li> <li>participation, and the activities of the seminary,</li> <li>mentored monographs,</li> <li>fieldwork,</li> <li>PsInvestiga/other activity</li> </ul>	40%
<b>TOTAL</b>	<b>100%</b>

To pass the course you need to obtain a **minimum score both in the part of the examination the part of operational activities** so that the two sides join. If it is not achieved that minimum score, and therefore is not approved, the numerical rating in suspense Sigma will be the closest to the real. Those students who have not submitted to the examination will be qualified as "not evaluated". Qualification of the continuous evaluation of operational activities will be retained for the recovery of the subject in the extraordinary call.