

Academic Year/course: 2022/23

## 25925 - Intelligence and Creativity: New Approaches

### Syllabus Information

**Academic Year:** 2022/23

**Subject:** 25925 - Intelligence and Creativity: New Approaches

**Faculty / School:** 301 - Facultad de Ciencias Sociales y Humanas

**Degree:** 270 - Degree in Psychology

**ECTS:** 6.0

**Year:** 4

**Semester:** First Four-month period

**Subject Type:** Compulsory

**Module:**

### 1. General information

### 2. Learning goals

### 3. Assessment (1st and 2nd call)

#### 3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that she has achieved the expected learning outcomes through the following evaluation activities.

Minimum requirements to pass the course:

The minimum requirements to pass the subject of Intelligence and Creativity: New Approaches are the following:

1. Getting at least a 5 out of 10 on the final exam. The exam consists of 100 multiple-choice questions with four answer alternatives. The correction formula is  $\text{grade} = \frac{\text{correct answers} - \text{errors}}{3}$  and has 60% of the final grade. Inappropriate items (with response rates lower than 15% or higher than 85%) will be reviewed and, where appropriate, discounted for the final calculation of the grade.

2. Carry out between four and six mandatory reports and obtain an average score of 5 out of 10. The reports can have a different value depending on the degree of difficulty and the effort required. The value of the reports represents 40% of the final grade. The structure of the reports consists of individual or group work (maximum 5 people). Reports can be evaluated by review after its delivery or through objective tests, according to the teacher's criteria. The teacher will determine mandatory as well as delivery dates.

It is an essential requirement to independently pass the final exam and the mandatory reports.

Activities throughout the course:

They will consist of activities, exercises, reviews, comments, evaluations, attendance at seminars and conferences, participation in studies or research, etc. The function of the activities is to promote knowledge of the course.

They will serve to improve the grade, if applicable, as well as to obtain the final grade of honors in the subject.

Theoretical assessment tests (continuous assessment only): at the end of each of the theoretical blocks, propose to carry out a non-mandatory follow-up test. The qualification of these tests will have a total 30% maximum in combination with the note of the theoretical exam. This percentage, which would weigh only applicable if the student so decides.

### 4. Methodology, learning tasks, syllabus and resources

#### 4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. It is based on an active methodology that favors the development of critical thinking. A wide range of teaching and learning tasks are implemented, such as lectures, practice sessions, autonomous work, and assessment tasks.

The learning process that has been designed for this subject is based on the following: The theoretical part of the subject will be developed through a master class supported by visual material and the necessary interaction and active participation of students in short activities proposed for a better understanding of the subject. The practical part will be carried out in the classrooms available for this purpose, in order to apply the theoretical part in practical exercises, carried out through individual and group work that enables the acquisition and development of skills like critical thinking, the possibility of teamwork, learning to debate, as well as reporting individually or in group and writing both the reflections and concepts learned as well as the skills, developing skills and attitudes. Students are expected to participate actively in the class throughout the semester.

Classroom materials will be available via Moodle. These include a repository of the lecture notes used in class, the course syllabus, short tests as well as other course-specific learning materials, including a discussion forum.

Further information regarding the course will be provided on the first day of class.

## 4.2. Learning tasks

This is a 6 ECTS course organized as follows:

- Lectures (3 ECTS): 30 hours.
- Practice sessions (20 ECTS): 20 hours.
- Assignments (10 ECTS): 10 hours.
- Autonomous work (- ECTS): 90 hours.

Lectures: 50 face-to-face participative sessions lasting 50 minutes each. The professor will present theoretical contents already available on the Moodle website.

Practice sessions: 15 practice sessions where students will work with case studies and problem-based activities (training activity program activities). Students are divided into four smaller groups.

Assignments: In groups, students will elaborate an essay (including bibliographical research, analysis, summary, scientific rigour, coherence of expression, and citations).

## 4.3. Syllabus

**The course will address the following topics:**

### Section 1: INTRODUCTION

Topic 1. The psychology of thinking and reasoning.

Topic 2. The development of reasoning and formal thought.

Topic 3. Conceptual change and reasoning.

### Section 2: THINKING AND REASONING MODALITIES

Topic 4. Visuospatial reasoning.

Topic 5. Analogy.

Topic 6. Deductive reasoning.

Topic 7. Inductive reasoning.

Topic 8. Mental models (I).

Topic 9. Mental models (II)

Topic 10. Narrative thinking.

### Section 3: PROBLEM-SOLVING, CREATIVITY, INTELLIGENCE

Topic 11. Problem-solving.

Topic 12. Strategies on problem-solving.

Topic 13. Creativity.

Topic 14. Intelligence.

## 4.4. Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the "Facultad de Ciencias Sociales y Humanas" website and Moodle ( <http://fcsh.unizar.es/psicologia/>, <https://moodle2.unizar.es> ).

## 4.5. Bibliography and recommended resources

Basic bibliography:

De Vega, M. (2006). Introducción a la psicología cognitiva. Madrid: Alianza.

Johnson-Laird, P.N. (2016). Cómo razonamos. Madrid: Antonio Machado Libros.

Kahneman, D. (2012). Pensar rápido, pensar despacio. Madrid: Penguin.

Recommended resources:

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=25925>