

# DEGREE CURRICULUM DIFFERENTIAL PSYCHOLOGY

Coordination: BLANCH PLANA, ANGEL

Academic year 2023-24

# Subject's general information

Subject name	DIFFERENTIAL PSYCHOLOGY							
Code	102945							
Semester	1st Q(SEMESTER) CONTINUED EVALUATION							
Typology	Degree Course Cha		Character		Modality			
	Bachelor's De Psychology	egree in	2	ICOMPULSORYI		Attendance- based		
Course number of credits (ECTS)	6							
Type of activity, credits, and groups	Activity type	PRAULA		TEORIA				
	Number of credits	1.8	1.8			·.2		
	Number of groups	2			1			
Coordination	BLANCH PLANA, ANGEL							
Department	PSYCHOLOGY, SOCIOLOGY AND SOCIAL WORK							
Important information on data processing	Consult this link for more information.							
Language	English, catalan, spanish.							

Teaching staff		Credits taught by teacher	Office and hour of attention
BLANCH PLANA, ANGEL	angel.blanch@udl.cat	9,36	

#### Subject's extra information

It is recommended a pass in the following subjects: Research Methods in Psychology and Basic Statistics. It is recommended a basic or intermediate command of English language.

#### Learning objectives

- 1. Identify, analyze, and measure individual differences in applied fields.
- 2. Obtain and interpret findings about individual differences with different instruments.
- 3. To become acquainted with the approaches, models, and theories of human intelligence.
- 4. To become acquainted with the factors involved in the origin and development of individual differences.

#### Competences

CB2 Applying knowledge to work or vocation in a professional way and possess the skills that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within the area of study.

CB5 Knowing how to develop those learning skills that are necessary to undertake further studies with a high degree of autonomy.

- CG1 Developing the ability to adapt to new situations and solve problems effectively.
- CG3 Showing abilities for interpersonal relationships.
- CG4 Recognizing the different theoretical perspectives in relation to the topics worked, comment on the conclusions and make decisions.
- CG5 Demonstrating critical capacity to make relevant decisions.
- CG6 Reflecting on the own limitations in a self-critical way and contemplating the possibility of seeking interdisciplinary collaborations.
- CG7 Acting with creativity, research culture and professional communication.
- CG10 Respecting the fundamental rights of equality between women and men, the promotion of Human Rights and the values of a culture of peace and democratic values.
- CE1 Identify and analyze the characteristics and needs of people, groups and organizations, as well as relevant contexts for the requested service.
- CE2 Plan the evaluation of the programs and / or psychological interventions, selecting the appropriate indicators and techniques.
- CE4 Analyze and interpret the results of the psychological evaluation.
- CE7 Provide information to users and establish an interpersonal relationship appropriate, taking into account the different contexts of professional relationship.
- CE8 Prepare technical, oral and written reports, on the results of the evaluation process, of the investigation or the services demanded, respecting the ethical commitment that diffusion demands of psychological knowledge.

CE9 Use the different documentary sources in psychology, show a domain of the strategies needed to access information and assess the need for updating documentary.

CE10 Manage, analyze and interpret data in the knowledge frameworks disciplines of the different fields of psychology.

CE11 Making decisions critically about the election, application and interpretation of the results derived from the different methods of psychological investigation.

CE12 Disseminate the knowledge derived from the theoretical revisions and the results of the psychological investigation.

CT1 Acquiring an adequate oral and written comprehension and expression in Catalan and Spanish.

CT2 Acquiring a significant command of a foreign language, especially English.

CT3 Acquiring training in the use of new technologies and information and communication technologies.

CT5 Acquiring essential notions of scientific thought.

#### Subject contents

The contents are structured in three different modules:

<u>MODULE 1. Theoretical and methodological framework.</u> Psychological traits and interindividual variability. Intraindividual differences. Intergroup differences. Intelligence and personality. Causal and conceptual analysis of interindividual variability. The heredity-environment controversy.

<u>MODULE 2. Human intelligence</u>. Construct and measurement of intelligence. Approaches and models. Cognitive abilities. Structure of intelligence. Extensions of the psychometric approach. Processing speed. Causal approach.

MODULE 3. Individual differences in applied settings. Education. Work. Health. Intelligence and job performance. Personality and occupational choice. Job stress. Person-environment fit. Sex differences.

#### Methodology

- 1. Lectures.
- 2. Conferences.
- 3. Seminars.
- 4. Team work.
- 5. Written work.
- 6. Problem-based learning.
- 7. Project development.
- 8. Case study.
- 9. Simulation.
- 10. Practical activities.

### Development plan

Week. Activities.

- 1. Presentation of the course.
- 2. Module 1. Practical activity (PA).
- 3. Presentation of theoretical contents.
- 4. Assignment preparation (EA 1).
- 5. EA 1.
- 6. Module 2. Practical activity (PA).
- 7. Presentation of theoretical contents.
- 8. Presentation of theoretical contents.
- 9. Assignment preparation (EA 2).
- 10. EA 2.
- 11. Module 3. Practical activity (PA).

- 12. Presentation of theoretical contents.
- 13 Presentation of theoretical contents.
- 14. Revision of practical activities (AP).
- 15. Assignment preparation (EA 3).

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x. EA 3.

x: Week 16, 17, 18, or 19.

#### **Evaluation**

The evaluation of the subject is continuous and summative, with 3 main evaluation activities (EAs) and practical activities (PA), the latter being mainly conducted in the classroom along the course. The specific weight of each test on the overall mark (Q) as well as the contents assessed is shown in the table below.

	EA 1 (25%)	EA 2 (25%)	EA 3 (25%)	PRACTICAL ACTIVITIES (PA) (25%)	
MODULE 1	Test with material	Multiple choice			
MODULE 2		test with abstract (DIN-A4 sheet)	Multiple choice test without material	Exercises and practical activities	
MODULE 3					

The final mark of the course is Q = EA 1 + EA 2 + EA 3 + PA. Passing the course requires  $Q \ge 5.00$ . Further characteristics of EAs and PA will be explained during the course.

Alternative assessment: EA 3 with a total score of 10 points.

## Bibliography

#### **Basic bibliography**

Ackerman, P.L. (1996). A theory of adult intellectual development: Process, personality, interests, and knowledge. *Intelligence*, *22*, 2, 227-257.

Anastasi, A. (1937). Differential psychology. Individual and group differences in behavior. New York: The MacMillan Company.

Andrés-Pueyo, A. (1997). Manual de psicologia diferencial. Madrid: McGraw-Hill.

Blanch, A. (2015). Evaluating fluid and crystallized abilities in the performance of an educational process. Instructional Science, 43, 3, 427-442.

Blanch, A., & Aluja, A. (2013). A regression tree of the aptitudes, personality, and academic performance relationship. Personality and Individual Differences, 54(6), 703-708.

Colom, R. (1995). Capacidades humanas. Madrid: Pirámide.

Colom, R. (2005). Psicología de las diferencias individuales. Teoría y práctica. Madrid: Pirámide.

Colom, R., & Andrés-Pueyo, A. (1999). El estudio de la inteligencia humana: Recapitulación ante el cambio de milenio. Psicothema, 11, 453-476.

Diamond. J. (1997). Armas, gérmenes y acero: breve historia de la humanidad en los últimos trece mil años. Madrid: Editorial Debate.

Domenech Delgado, B. (1995). Introducción al estudio de la inteligencia: Teorias cognitivas. *Revista Interuniversitaria de Formación del Profesorado, 23*, 149-162; (PÁGINAS 159-160)

Eysenck, H.J. (1983). Estructura y medición de la inteligencia. Barcelona: Herder.

Flinn, M.V., Geary, D.C., & Ward, C.V. (2005). Ecological dominance, social competition, and coalitionary arms races: Why humans evolved extraordinary intelligence. Evolution and Human Behavior, 26, 10-46.

Hunt, E., & Carlson, J. (2007). Considerations relating to the study of group differences in intelligence. Perspectives on Psychological Science, 2, 2, 194-213.

Hunt, E. (1980). Intelligence as an information-processing concept. British Journal of Psychology, 7, 449-476. Juan-Espinosa, M. (1997). La inteligencia según Hans Jürgen Eysenck. Revista de Psicologia General y Aplicada, 50, 4, 513-537.

Juan-Espinosa, M. (1997). Geografía de la inteligencia humana. Las aptitudes cognitivas. Madrid: Piràmide. Lubinski, D. (2000). Scientific and social significance of assessing individual differences: "Sinking shafts at a few critical points". Annual Review of Psychology, 51, 405-444.

Pinker, S. (2002). The blank slate. The modern denial of human nature. London: Penguin Books.

Plomin, R., & Spinath, F.M. (2004). Intelligence: Genetics, genes, and genomics. Journal of Personality and Social Psychology, 86, 112-129

Turkheimer, E. (2000). Three laws of behavior genetics and what they mean. Current Directions in Psychological Science, 9, 160-164.

#### Complementary bibliography

Aluja, A., Blanch, A. (2004). Depressive mood and social maladjustment: Differential effects on academic achievement. European Journal of Psychological Assessment, 19, 121-131.

Aluja, A., Blanch, A., y García, L. (2005). Dimensionality of the Maslach Burnout Inventory in school teachers: A study of several proposals. Eurpean Journal of Psychological Assessment, 21, 67-76.

Bailey, D.H., & Geary, D.C. (2009). Hominid brain evolution. Testing climatic, ecological, and social competition models. *Human Nature*, *20*, 67-79

Blanch, A. (2016). Expert performance of men and women: A cross-cultural study in the chess domain. *Personality and Individual Differences*, 101, 90-97.

Blanch, A. (2016). Social support as a mediator between job control and psychological strain. Social Science & Medicine, 157, 148-155.

Blanch, A. (2018). Top hundred chess experts: A cross-domain analysis of change over time. *Intelligence*, 71, 76-84.

Blanch, A., & Aluja, A. (2011). Personality and job stress: A comparison of direct effects on parenting. *Spanish Journal of Psychology*, *14*(2), 667-674.

Blanch, A., & Aluja, A. (2012). Social support (family and supervisor), work-family conflict, and burnout: Sex differences. Human Relations, 65(7), 811-833.

Blanch, A., Balada, F., & Aluja, A. (2013). Presentation and AcqKnowledge: An application of software to study human emotions and individual differences. Computer Methods and Programs in Biomedicine, 110(1), 89-98.

Blanch, A., Balada, F., & Aluja, A. (2014). Habituation in acoustic startle reflex: Individual differences in personality. International Journal of Psychophysiology, 91, 89-98.

Blanch, A., García, H., Llaveria, A., & Aluja, A. (2017). The Spearman's law of diminishing returns in chess. *Personality and Individual Differences*, *104*, 434-441.

Blanch, A. Torrelles, B., Aluja, A., & Salinas, J.A. (2009). Age and lost working days as a result of an occupational accident: A study in a shiftwork rotation system. Safety Science, 47, 1359-1363.

Bouchard, T.J. (1998). Genetic and environmental influences on adult intelligence and special mental abilities. Human Biology, 70, 257-279.

Castejón, J.L., Pérez, A.M., & Gilar, R. (2010). Confirmatory factor analysis of Project Spectrum activities. A second-order g factor or multiple intelligences?. *Intelligence*, *38*, 481-496

Der, G., & Deary, I.J. (2006). Age and sex differences in reaction time in adulthood: Results from the United Kingdom health and life style survey. *Psychology and Aging, 21*, 1, 62-73.

Gardner, H. (2006). On failing to grasp the core of MI theory: A response to Visser et al. *Intelligence, 34*, 503-505. Gottfredson, L.S. (1997). Mainstream science on intelligence: An editorial with 52 signatories, history and bibliography. Intelligence, 24, 13-23.

Grabner, R.H., Fink, A., Stipacek, A., Neuper, C., Neubauer, A.C. (2004). Intelligence and working memory systems: evidence of neural efficiency in alpha band ERD. Cognitive Brain Research, 20, 212-225.

Halpern, D. (1997). Sex differences in intelligence: Implications for education. American Psychologist, 52, 1091-1102.

Jensen, A.R., & Munro, E. (1979). Reaction time, movement time, and intelligence. *Intelligence, 3*, 121-126. Jung, R.E., & Haier, R.J. (2007). The parieto-frontal integration theory (P-FIT) of intelligence: Converging neuroimaging evidence. *Behavioral and Brain Sciences, 30*, 135-187.

Neubauer, A.C., & Fink, A. (2009). Intelligence and neural efficiency. *Neuroscience and Biobehavioral Reviews, 33*, 1004-1023

Plomin, R., & Petrill, S.A. (1997). Genetics and intelligence: What's new? Intelligence, 24, 53-77.

Sternberg, R.J., Prieto, M.D., & Castejón, J.L. (2000). Análisis factorial confirmatorio del Sternberg Triarchic Abilities Test (nivel-H) en una muestra española: Resultados preliminares. *Psicothema*, *12*, 642-647.

Visser, B.A., Ashton, M.C., & Vernon, P.A. (2006). Beyond g: Putting multiple intelligences theory to the test. *Intelligence, 34*, 487-502.

Visser, B.A., Ashton, M.C., & Vernon, P.A. (2006). g and the measurement of Multiple Intelligences: A response to Gardner. *Intelligence*, *34*, 507-510.

Wood, W. y Eagly, A.H. (2002). A cross-cultural analysis of the behavior of women and men: Implications for the origins of sex differences. Psychological Bulletin, 128, 699-727.

#### Internet

International Personality Item Pool: A Scientific Collaboratory\* for the Development of Advanced Measures of Personality and Other Individual Differences. http://ipip.ori.org/

International Society for Intelligence Research. http://www.isironline.org/