

COURSE UNIT INFORMATION SHEET (SYLLABUS)

2020/2021

Name INTELLIGENCE (IMP: 1st Cycle / 2nd Grade / 2nd Semester / Compulsory Curricular Unit)
Teaching staff Maria João Afonso, PhD (Professor in charge) Maria João Varandas dos Santos, MA
ECTS 6
Functioning Four hours of classes / week, two Theoretical and two Practical. - Theoretical Class (all students): Mondays - 17-19pm – Online (Anfiteatro I) - Practical Classes (4 alternative classes): P4 Tuesdays – 9-11am – Online (Anfiteatro II) - P3 Tuesdays – 11-13am – Online (Anfiteatro II) - P2 Thursdays – 13-15am – Online (Room 4) - P1 Thursdays – 15-17am – Online (Room 4) Tutorial Online (Office A330): - Tutoring Schedule – <u>Theoretical Classes</u> (M^a João Afonso): Mondays, 19-20pm - Tutoring Schedule – <u>Practical Classes</u> (M^a João Afonso/M^a João Santos): Tuesdays, 13-15pm
Learning goals General: Acquiring and developing knowledge, skills and epistemological attitudes appropriate for basic and applied research in the field of Human Intelligence. Specific: - Achieving and constructing scientific knowledge in the field of Intelligence, in terms of observation levels and of behavior understanding and explanation;

- Apprehending contrasts and complementarities between different paradigms (or metaphors) of intelligence research, based on the recognition of their foundations, goals and contributes;
- Achieving a conceptual framework for the understanding of individual differences in cognition, in terms of dimensions (eg, intelligence and abilities), varieties (eg, between individuals and groups), and factors behind psychological differences (eg, biological and environmental);
- Apprehending the nature, meaning and fundamentals of the main controversies emergent in the field of Intelligence and some of their consequences for psychological assessment and intervention;
- Developing scientific and technical skills for the use of research methods in the field of intelligence;
- Developing flexible and critical attitudes towards conceptual frameworks, methodological approaches, paths to knowledge integration and the questioning of intelligence assessment and intervention practices.

Skills to be developed

- Knowledge in the domain of Intelligence: Epistemological framework for understanding and comparing different research paradigms; the “locus” and the “meaning” of the construct in contemporary Psychology; intelligence concepts, models and theories aiming at understanding the contours and essential features of the construct; knowledge on the domains and subdomains of intelligence research; recognition of contemporary efforts for integration in the domain; knowledge on intelligence empirical research and on their applications to assessment and intervention in Psychology;
- Knowledge of methodologies and research techniques used in the field of human intelligence: Contrasts and complementarities with other methodologies of Psychology;
- Competences for locating, collecting and analyzing information obtained from sources and documents of a diversified nature and origin;
- Skills for the application of statistics in the field of intelligence research;
- Competences in conceptualizing fundamental and applied research of intelligence; recognition of the connection to other domains (Psychometrics, Psychological Assessment, Cognitive Psychology, Personality Psychology, Psychopathology); and of the connection to application or intervention contexts (clinical, organizational, educational, forensic, research, etc.).

Prerequisites (precedences)

Not applicable.

Contents

1. Intelligence: From the concept to the construct (Theoretical Classes)

- Conceptualizing intelligence: Origins and development of research, concepts and definitions; current terminology.
- Paradigms and metaphors of intelligence research: Contours and foundations of intelligence research; the metaphors of mind – BIOLOGICAL, GEOGRAPHIC, EPISTEMOLOGICAL, COMPUTATIONAL, SOCIOLOGICAL, and ANTHROPOLOGICAL.
- Major intelligence models and their implications for theory, assessment, and intervention: The *locus* and the meaning of the construct in Psychology.

2. Systems Metaphor: An integrative approach to intelligence research (Theoretical Classes)

- Gardner and the Multiple Intelligences Theory
- Sternberg and the Successful Intelligence Theory
- Salovey & Mayer and the Emotional Intelligence Theory
- Ceci and the Bio-ecological Model of Intelligence
- van der Maas and the Dynamical Model of General Intelligence

3. Topics and debates in the field of intelligence (Theoretical and Theoretical-Practical Classes)

- Implicit and scientific concepts of intelligence: Is intelligence nothing more than a cultural product?
- Intelligence, heredity and environment: Does intelligence depend on genes or can it be trained?
- One intelligence or several intelligences: Does general intelligence (the “g factor” or General Cognitive Abilities. GCA) really “exist” or may intelligence be a plural concept?
- Intelligence x personality relationship: Why do smart people sometimes do dumb things?
- Intelligence and Success: Does intelligence predict success in life?
- Intelligence and Emotion: Is Emotional Intelligence a set of cognitive skills or a group of personality traits?

4. Assessment of intelligence (Theoretical-Practical Classes and Practical Classes)

- Paradigms/Metaphors of research and intelligence assessment: Methods, techniques and instruments.
- The measurement of General Intelligence:
 - From Binet to Wechsler: Individual tests of intelligence. Introduction to Wechsler’s concept of intelligence and of intelligence assessment. Type of scores used in general intelligence test batteries (Ratio IQ and Deviation IQ) and its meaning, uses and limits.
 - G factor tests: Theoretical foundations, contents, purposes and contexts of use.
- The measurement of Aptitudes and Abilities: Multiple Aptitudes Tests
 - Multiple Aptitudes test batteries: Theoretical foundations, contents, purposes and contexts of use.
- Integrating intelligence differential measurement with cognitive assessment: Aptitude tests and the CHC model; The “new generation” instruments.

Bibliography

- AFONSO, M.J. (2007). *Paradigmas Diferencial e Sistémico de Investigação da Inteligência Humana. Perspetivas sobre Lugar e o Sentido do constructo*. Dissertação de Doutoramento não publicada. Universidade de Lisboa.
- GOLDSTEIN, S., PRINCIOTTA, D., & NAGLIERI, J.A. (Eds.) (2015). *Handbook of Intelligence. Evolutionary Theory, Historical Perspective, and Current Concepts*. New York: Springer.
- STERNBERG, R.J. (ED.) (2018). *The Nature of Human Intelligence*. New York: Cambridge University Press.
- STERNBERG, R.J. (ED.) (2020). *Human Intelligence: An Introduction*. New York: Cambridge University Press.
- STERNBERG, R.J., & KAUFMAN, S.B. (Eds.) (2011). *The Cambridge Handbook of Intelligence*. New York: Cambridge University Press.

Teaching methods

- Dissertation lessons, allowing student participation; theoretical presentation focusing on epistemological and conceptual frameworks, theoretical contents and critical perspectives;
- Theoretical-practical lessons, linking conceptual and application contents with practical components of the unit;
- Practical lessons, for direct contact and confrontation with contexts, problems and situations and controversies emerging in the field of intelligence assessment;
- Practical assignment (compulsory), aiming the development of theoretical and practical competences, as well as epistemological and ethical attitudes towards the domain of intelligence research;
- Self-assessment exercises in class, with sample questions of the kind used in the final examination (multiple choice or development) and their correction and comment in the class;
- Tutorial sessions, weekly scheduled, to support students in their study planning and in the practical assignment tasks;
- E-learning, using the Moodle platform, for document distribution, the assistance of student's training and practical assignment tasks.

Evaluation Regimes (General and/or Alternative)

- General Evaluation Regime: Includes Written Examination and compulsory (group) Practical Assignment.
- In this course unit, it is **not applied any alternative regime**.

Evaluation Elements (Dates due, weights, minimum required grades)

- **Written Final Examination, compulsory**: For the assessment of students learning in the content areas explored in the theoretical, theoretical-practical, and practical classes.

Weighting in the final grade: **0,70**, applied to the examination mark, when $\geq 9,5$ (14 points / 20).

Examination structure: 10 Multiple Choice items (with theoretical, theoretical-practical, and practical contents), with a brief written justification required, for the response choice made + 1 dissertation item (with theoretical, theoretical-practical or practical content).

- **Practical assignment: Compulsory**: group assignment (4 or 5 students) supervised and supported by the Tutorial sessions; themes will be presented at one of the first practical classes.

Weighting in the final grade: **0,30**, applied to the practical assignment mark, when $\geq 9,5$ (6 points / 20).

Deadline: Deadlines will be set, depending on the registration and distribution of the themes.

→ FINAL GRADE:

- In accordance to the Article number 7 of the Learning Assessment Regulation [*Regulamento de Avaliação das Aprendizagens*], only the students who succeeded in both compulsory evaluation elements are considered to be in conditions to be evaluated, and then receiving an approved or a not approved evaluation.

- If **both** compulsory evaluation elements meet the respective minimum criteria (are equal or above the minimum mark required for approval, 9,5), the weighting coefficients are applied, and the student receives the respective final grade.

- If **one of the two** required elements of evaluation does not reach the minimum standard of achievement, the student will receive the mark of the evaluation element that has not fulfilled the minimum criteria of use.

- If **one or both** the required evaluation elements are missing, the student will receive a registration of "NA" [Não Avaliado] (no evaluation) which means he or she has not the complete information to allow the final grade attribution.

Rules for grade improvement

- Any of the two grades – written Examination and Practical Assignment – can be improved in the 2nd Season of evaluation.

- The grade obtained in one of the evaluation elements, written examination or practical assignment, while in the same year the approval is not attained at the other evaluation element, is stored for one school year, but it can still be improved in the first or in the second season of the following school year.

- Practical assignments cannot be improved in the Special and Specific Season (September).

Rules for students having previously failed the course unit

- Students will have to repeat the course unit if they don't achieve a grade which is equal or above 9.5 in one or both evaluation elements (written examination and practical assignment);

- The grade obtained in one of the evaluation elements, written examination, or practical assignment, while in the same year the approval is not attained at the other evaluation element, is stored for one school year, but it can still be improved in the first or in the second season of the following school year.

Requirements on attendance and punctuality

- Attendance regime: The attendance to the classes is sincerely advised, and so the student should seek to be present at least at the minimum of 9 lessons / semester, as the students should attend at least 2/3 of the lessons of each type (Theoretical and Practical lessons) (Article number 8 of the Learning Assessment Regulation [*Regulamento de Avaliação das Aprendizagens*]).

- There is no maximum limit of nonattendances allowed; the number of nonattendances is entirely a students responsibility. However, attendance in class will be registered for summary purposes and may be considered as qualitative information in student evaluation.

Rules for special students (workers, elite athletes, student body leaders, military, fathers/mothers, with special needs)

- The only students qualified for the application of the law regarding the worker-student status, as well as other statutes covered by the law, are those who have formalized their status at the Academic Services.

- The working students who have formalized their status at the Academic Services can use the Tutorial periods for

individual supervision of their training and study.

- The same principle of individual supervision is applied to other groups of students considered exceptions (top athletes, students association leaders, military students, parent students, students with special educational needs) who have formalized their status at the Academic Services.

Language of instruction

- Lectures and Final Examination: Portuguese (the exam can be answered in English).
- Readings: Portuguese, English, French and Spanish.

Disciplinary violations and penalties

According to the Evaluation of Learning Regulation of the Faculty of Psychology of the University of Lisbon, the following behaviors are considered as disciplinary offenses subject to disciplinary action:

- a) To use or attempt to use materials, information, notes, study resources or other objects and equipment not authorized in academic exercises;
- b) To help or try to help a colleague in committing a disciplinary offense;
- c) To submit the same written work for evaluation in different course units without permission from the instructors, even if with minor changes;
- d) To present someone else's work as one's own;
- e) To forge, or change without permission from the author, any information or citation in an academic work;
- f) To interfere, change or attempt to change grades;
- g) To try to prevent or interfere with the proper functioning of classes, research or other academic activities;
- h) To make false accusations regarding instructors, governance bodies, other students or non-teaching staff of the FPUL;
- i) To falsify signatures in attendance sheets, documents relating to evaluation elements or in any official document relating to an academic process or status.

Disciplinary offenses committed in any assessment element can lead to its annulment, and must be reported to the Pedagogical Council or, considering their gravity and repetition, may lead to other penalties, to be determined by the Rector of the University of Lisbon.