

**COURSE DATA****Data Subject**

<b>Code</b>	44190
<b>Name</b>	Updates and developments in biopsychosocial approaches to health and disease
<b>Cycle</b>	Master's degree
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2020 - 2021

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
2191 - M.U. en Psicología General Sanitaria	Faculty of Psychology and Speech Therapy	2	First term
2244 - M.U. en Psicología General Sanitaria	Faculty of Psychology and Speech Therapy	1	Second term
3150 - Health Psychology	Doctoral School	0	Annual

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
2191 - M.U. en Psicología General Sanitaria	5 - Updates and developments in biopsychosocial approaches to health and disease	Optional
2244 - M.U. en Psicología General Sanitaria	5 - Updates and developments in biopsychosocial approaches to health and disease	Optional
3150 - Health Psychology	1 - Complementos de Formación	Optional

**Coordination**

<b>Name</b>	<b>Department</b>
ATIENZA GONZALEZ, FRANCISCO L.	295 - Personality, Evaluation and Psychological Treatment
COSTA FERRER, RAQUEL	268 - Psychobiology



## SUMMARY

Emphasis will be placed on this subject in the knowledge and understanding of health from a holistic perspective that includes biological, psychological and social aspects. It deepened in major advances since these fields are being done in the field of health psychology. For example, the factors of vulnerability and resistance to stress, the study of biomarkers that allow us to detect and the main techniques of neuropsychological assessment of stress disorders are studied.

Psychobiological potential impacts of the use of pharmacotherapy and a health psychologist must know are also studied. In addition, it offers the student / a joint and integrated vision of the main things you should know a professional to plan the intervention to be conducted with people with a disorder substance, as is being able to select and perform the main strategies to increase patient predisposition to change, meet the management and use of the instruments that can be used in the evaluation of a patient with addictive behavior and know the main treatments and psychological intervention strategies that enjoy the highest level of scientific evidence in the treatment of addiction.

A space to study how psychosocial factors are associated with health and disease and mainly the importance that social support has in promoting health and well-being of people is also dedicated.

## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

No prerequisites

## OUTCOMES

### 2191 - M.U. en Psicología General Sanitaria

- Have a concern for achieving quality work.
- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Students should possess and understand foundational knowledge that enables original thinking and research in the field.
- Have a good command of effective oral communication skills in multiple formats (e.g., group discussion, debate, conference, etc.) and for multiple purposes (e.g., inform, defend, explain, persuade, argue, teach, etc.).



- Acquire, develop and implement a comprehensive health concept that includes the biopsychosocial components of health, in accordance with the guidelines established by WHO.
- Know the duties and responsibilities of health professionals as regards confidentiality of information and protection of personal data of patients.
- Formulate working hypotheses in research and collect and critically evaluate information to solve problems applying the scientific method.
- Obtain an in-depth knowledge of the psychological nature of human behavioural disorders..
- Obtain an in-depth knowledge of the psychosocial factors associated with health problems and disease.

## LEARNING OUTCOMES

- Identify and define the biopsychosocial components of health and disease.
- Identify factors related to stress and its consequences on health.
- Identify the fundamentals, concepts and theoretical models associated with health and disease.
- Being able to select and implement the major strategies to increase patient predisposition to change.
- Knowing the handling and use of instruments and intervention strategies that can be used in the treatment of addictions.
- Know the main explanatory mechanisms have been proposed to the positive effect of social support on health and wellness.
- Knowing the interest of social support as a tool for intervention, as well as features and formats of this type of intervention.
- Being able to identify the psychobiological vulnerability factors and stress resistance, in order to improve health. Know and use the different biomarkers that can be used in the process of stress.
- Being able to carry out a comprehensive neuropsychological assessment of stress and its effects on the brain.
- Being able to identify and discern the therapeutic effects of psychotropic drugs on the side, and integrate that information into the intervention strategies used.

## DESCRIPTION OF CONTENTS

### 1. Importance of stress and its consequences in health psychology.

1.- Main theories on the relationship between stress and health.

1.1. Stress as psychophysiological response.

1.2- Stress as a stimulus

1.3.- Stress as a transaction.

2. Stress and illness: psychological processes

2.1- Cognitive processes, stress and health

2.2- Emotional processes, stress and health

2.3- Behavioral processes, stress and health

3. Vulnerability factors and protective factors against stress



- 3.1 Personality: The five "big" personality traits, personality, alphabet (A, B, C, D ...), strength, optimism, locus of control.
- 3.2 Coping strategies
- 3.3 Social support
- 3.4 Stress management techniques

## **2. Factors of vulnerability and stress resistance, and neuropsychological evaluation biomarkers of stress disorders**

- 2.1 The psychobiological responses of stress: a coordinated response: Neural basis of the stress response. Response of the autonomic nervous system (ANS). Hormonal response. Immunological response.
- 2.2 The chronification of the stress response and its implications on health.
- 2.3 Stress and its relation with disorders:
  - 2.3.1 Cardiovascular System: Hypertension and risk factors.
  - 2.3.2 Digestive system: Digestion, hormonal response and SNA. Diabetes. Metabolic syndrome. Functional Gastrointestinal Disorders.
  - 2.3.3 Stress and associated sleep disorders.

## **3. Approach to the psychological effects of pharmacotherapy**

- 1. Introduction to pharmacotherapy in the treatment of mental disorders.
  - Synaptic pathology and mental illness
  - Neurogenesis as a target for the treatment of mental illness
  - Epigenetics and individual differences
  - Biomarkers
  - Transcranial magnetic stimulation and deep brain stimulation
  - Decreased stigma associated with mental illness
- 2. New approaches to the treatment of mental disorders with psychotropic drugs and problems associated with side effects
  - Depression and antidepressants. Current research in the search for new antidepressants
  - Schizophrenia and antipsychotics. Current research in the search for new drugs for schizophrenia
- 3. Neurobiology of fear and animal models. Pharmacological interventions in the consolidation and extinction of fear memory.
  - Neurobiology of fear and animal models
  - Pharmacological interventions: Effects of propranolol on memory consolidation of fear
  - Evidence in animal models
  - Clinical studies
  - Limitations
  - Pharmacological interventions: Effects of D-cycloserine in facilitating extinction of fear
  - Evidence in animal models
  - Clinical studies
  - Limitations



#### **4. Study of the psychological nature of human behavior and its disorders: addictive behaviors.**

1. Healthcare network in addictive behaviors. Where you work and what I require?
2. The willingness to change: Stages, processes and levels of change.
3. Interview motivational therapy and addiction.
4. Protocols evaluation and diagnosis of disorders substance use disorder, gambling and technological addictions.
5. Treatment protocols based on evidence in addictive behaviors (substance use disorders together, gambling disorder and technological addictions).

#### **5. Psychosocial factors associated with health and disease: the importance of social support**

1. Background and definition of social support  
Precedents in the study of social support: Epidemiological studies, studies on stress and movement of community mental health  
The definition of social support
2. Stress, health and welfare; the effect of social support  
Protective effects model (buffer)  
Model main effects
3. Evaluation of social support  
Structural and functional perspective  
Assessment instruments of social support
4. Social support and intervention tool; support groups and mutual aid  
Interventions based on social support  
Dyadic Interventions  
Support groups  
Self-help groups

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	60,00	100
Development of group work	10,00	0
Development of individual work	10,00	0
Study and independent work	20,00	0
Readings supplementary material	5,00	0
Preparation of evaluation activities	10,00	0
Preparing lectures	10,00	0
Preparation of practical classes and problem	10,00	0
Resolution of case studies	15,00	0
<b>TOTAL</b>	<b>150,00</b>	

**TEACHING METHODOLOGY**

- . Group learning with the teacher. In class attendance lecture model, indicating those students most suitable for further preparation of the subject in depth resources will be used.
- . Ruled tutorials. Teachers guide students in building their knowledge; orient in the elaboration of the work, resolve doubts or difficulties related to the subject. They will be in groups to solve problems, to work, etc.
- . Virtual Classroom (<http://pizarra.uv.es>). In this virtual space, students can find documents, information or relevant news of the subjects that teachers deposited.
- . Preparation of cases and assumptions group.
- . Case studies, exercises and problems, to stimulate problem-based learning, project-oriented and cooperative using interdisciplinary groups, practice sessions, and conducting group work.
- . Development of individual and group work.

**EVALUATION****EVALUATION SYSTEM**

Assessment of theoretical and practical contents by written test of response alternatives.  
Attendance at seminars/conferences. Activities.

**WEIGHING**

Assessment of theoretical and practical content through written test of response alternatives (30% of the final score, recoverable). Attendance at seminars/conferences (10% of the final score, not recoverable). Activities (60% of the final score, recoverable). In the second call, the activities will be recoverable by taking a written test that assesses the acquisition of learning results.



### MINIMUM REQUIREMENTS

To pass the subject in 1st or 2nd call, it will be necessary to achieve a minimum mastery of 50% in the valuation of theoretical and practical contents by means of written test of response alternatives (30% of the final score, recoverable).

### RATING SYSTEM

The qualification of the subject will be subject to the provisions of the Evaluation and Qualification Regulations of the Universitat de València for degrees and master degrees (ACGUV 108/2017). Only the different sections included in the evaluation will be added when the minimum requirements established.

The granting of an Honor Qualification will be based on the regulations regarding the University of Valencia, which takes into account the number of Honor Qualification per group. The evaluation of theoretical and practical contents by means of a written test of response alternatives will also include a development question that can be considered for the Honors Qualification (QH) award. In this regard, we will start with the number of MH that can be granted in each of the groups. Based on this, the possibility of granting the MH to the students will be assessed based on the total score obtained by the student on 10 points, and only in those cases in which the grade is 9 points or higher. In order to qualify for Honor Qualification, students must have completed the development question whose assessment will serve to determine the Honor Qualification assignment in those cases in which the students that can accede to it are superior to the ones of qualifications of honor that can be awarded and / or in case of a tie in the grade obtained by the student about 10 points.

The grade of the subject will incorporate the grade obtained in first call according to the following rules:

- If there is no qualification in the assessment section of theoretical and practical contents, by means of a written test of response alternatives, the grade will be NOT PRESENTED, regardless of attendance at seminars/conferences and of activities carried out.
- If there is a qualification in the assessment section of theoretical and practical contents by means of a written test of response alternatives, and this does not meet the minimum requirements, a SUSPENSIVE and numerical note will be recorded on base 10 of the qualification of this section.

In the second call, proceed according to the following rules:

- If there is no qualification in the assessment section of theoretical and practical contents, by means of a written test of response alternatives, the grade will be NOT PRESENTED, regardless of attendance at seminars/conferences and of activities carried out.
- If there is a qualification in the assessment section of theoretical and practical contents by means of a written test of response alternatives, and this does not meet the minimum requirements, a SUSPENSIVE and numerical note will be recorded on base 10 of the qualification of this section.
- If there is a qualification in the assessment section of theoretical and practical contents by means of a written test of response alternatives, and this meets the minimum requirements, the assessment for attendance at seminars/conferences and/or assessment of activities.

The consultation and challenge of the qualification obtained in evaluation tasks, will be subject to the provisions of the Rules of Challenging Qualifications (ACGUV of april 29, 2008).

<http://www.uv.es/=sgeneral/Reglamentacio/Doc/Estudis/C9.pdf>



## REFERENCES

### Basic

- b1 Becoña Iglesias, E. y Cortés Tomás, M.T. (coords) (2008). Guía clínica de intervención psicológica en adicciones. Barcelona: Socidrogalcohol-Plan Nacional sobre Drogas. -Cap 1 (Págs. 13 a 21) y Cap 3 (Págs.41 a 69)
- b2 Bobes J., Bascaran, M.T., Bobes-Bascarán, M.T., Carballo, J.L., Díaz, E.M., Flórez, G., García-Portilla, M.P. & Sáiz, P.A. (2007). Valoración de la gravedad de la adicción: aplicación a la gestión clínica y monitorización de los tratamientos. Madrid: Plan Nacional sobre Drogas. Cap 1 (págs. 11 a 15) y Cap 3 (págs. 77 a 104)
- b3 Becoña Iglesias, E. y Cortés Tomás, M.T (coord.). (2011). Manual de adicciones para psicólogos especialistas en psicología clínica en formación. Valencia: Socidrogalcohol. Cap 4 (Págs. 65 a 80); Cap 5 (Págs.81 a 95) y Cap 7 (Págs.113 a 141).
- b4 Sandi, C., Venero, C. y Cordero, M.I. (2001). Estrés, memoria y trastornos asociados. Ariel Neurociencia.
- b5 Lila,M y Gracia,E (1996) La integración de los sistemas formales e informales de apoyo social. Informació Psicológica, 58, 28-34
- b6 Lila,M.;Gracia,E & Murgui,S (2013). Psychological adjustment and victim-blaming among intimate partner violenceoffenders: The role of social support and stressful life events. The European Journal of Psychology Applied to Legal Context 5, 147-153
- b7 Stahl SM (2019). Casos clínicos. Psicofarmacología esencial de Stahl. Ed. Aula Medica
- b8 Stahl, SM( 2014) . Guía del prescriptor. Ed. Aula Médica
- b9 R.J. y Baum, A.B. (2011): The Handbook of Stress Science. Biology, Psychology and Health. New York: Springer Publishing Company.
- b10 Ogden, J. (2007): Health Psychology. A Textbook. New York: McGrawHill, Open University Press.

### Additional

- c1 Simpkins A, Simpkins AM. (2013) Neuroscience for clinicians. Ed. Springer
- Muse M., Moore BA. (2012) Handbook of clinical psychopharmacology for psychologists. John Wiley & Sons.
- Stolerman IP (2010) Encyclopedia of Psychopharmacology. Ed. Springer.
- c2 Hofmann SG, Otto MW, PollackMH, Smits JA. (2015) D-cycloserine augmentation of cognitive behavioral therapy for anxiety disorders: an update. Curr Psychiatry Rep. 17(1): 532. doi: 10.1007/s11920-014-0532-2. Review.
- c3 PURVES, D., AUGUSTINE, G.J., FITZPATRICK, D., HALL, W.C., LAMANTIA, A-S., MOONEY, R.D., PLATT, M.L. y WHITE, L.E. (2018). Emotion (cap. 31). En: Neurosciences, 6ª ed. Sunderland, MA: Sinauer Associates.



## **ADDENDUM COVID-19**

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

### 1. Contents

The contents of the teaching guide are maintained.

### 2. Volume of work and temporary planning of teaching

The subject-matter is taught in the first semester in title 2191 and in the second semester title 2244.

In the subject taught in the first semester (title 2191), teaching is adapted based on the ACGUV of July 1, 2020 for teaching official degrees from the University of Valencia in the first semester of the 2020-21 academic year.

Hybrid teaching model with restricted attendance during the first semester, combining attendance and non-attendance, synchronous or asynchronous. 32% of the teaching will be done with presentality and 68% of the teaching will be non presential.

In the subject taught in the second semester (title 2244), teaching is adapted based on the ACGUV of February 2, 2021, authorizing adjustments in the adaptation of the teaching of official degrees for the start of teaching in the second semester of the 2020-21 academic year. Non presential teaching is planned, although it could be different according to the evolution of the pandemic and the indications of the competent educational administration and the health authorities.

### 3. Teaching methodology

In the subject taught in the first semester (title 2191), the presential teaching will be mainly aimed at solving doubts and carrying out activities and will have a model of attendance for days. In non presential teaching, synchronous modalities that favor direct interaction with students will be prioritized. Active and participatory methodology carried out face-to-face and non-face-to-face, through the resources available in the Virtual Classroom, integrating different instructional methodologies in order to enhance the significant learning of the knowledge involved and the development of the subject's own competences. Continuous evaluation activities will be promoted.



Deposit of material in the Virtual Classroom for the development of presential and non presential teaching.

Proposal of activities to be carried out in presential and non presential forms.

Videoconference via Blackboard Collaborate (preferably synchronous).

Presentations recorded and with annotations.

Discussions forum in Virtual Classroom.

Solutions to the proposed activities and comments on tasks carried out.

Tutoring by videoconference with Blackboard Collaborate.

Forum in Virtual Classroom to monitor sessions and tutorials.

Email @alumni for tutorials and monitoring of how teaching takes place.

#### 4. Evaluation

**WEIGHTING:** The weight in the final grade of the continuous evaluation is increased: Assessment of theoretical and practical contents by means of written test of response alternatives (30% of the final grade, recoverable). Attendance at seminars/conferences (10% of the final grade, not recoverable). Activities (60% of the final grade, recoverable).

#### **RATING SYSTEM:**

The final test will be held in accordance with the regime determined by the ACGUV in force at the time.

The aspects of the Evaluation included in the Teaching Guide and which are not mentioned in this Addendum, remain as they are included in the Guide.

#### 5. Bibliography

Bibliography is maintained. The materials necessary for completing the tasks and the proper development of learning will be incorporated and/or linked by the teachers in the virtual classroom.