



**Department of Biomedical Sciences
Physiotherapy Degree Programme
Behavioural Disorders Syllabus**

**Academic year 2020-2021. Academic term: second semester of second year
Course coordinator: Prof Giampaolo Perna**

PSYCHIATRY (1 ECTS)

Prof. Giampaolo Perna	Full Professor at Humanitas University and Head of the Centre for Personalized Medicine of Anxiety and Panic Disorders at Humanitas SanpioX. He is also Voluntary Professor in Psychiatry & Behavioral Sciences at the University of Miami (USA) and Visiting Associate Professor in Psychiatry & Neuropsychology at Maastricht University (The Netherlands). He published over 170 peer-reviewed scientific articles in the JCI with an H-Index of 35. He is the Director of the Department of Clinical Neuroscience at the Nursing Home Villa San Benedetto Menni - Suore Ospedaliere in Albese con Cassano (Como). E-mail: giampaolo.perna@hunimed.eu
Objectives	Present behavioural disorders of psychiatric origin that may slow down the functional recovery of patients undergoing physiotherapy treatment
Teaching methods	Lectures and classroom discussions
Teaching material	Slides presented during the lecture and available to physiotherapy students on LMS
Content	
1) Definition of psychiatry and anxiety disorders. Principles of psychopathology, definition of normality and pathology. Concept of mental health and the role of context. Phenomenology of the psychophysical defensive system (anxiety, phobia and panic). Mood between normality and pathology. The interview in psychiatry. Classification and main symptoms of anxiety and panic disorders, phobias. Social anxiety disorder and generalised anxiety	
2) Obsessive compulsive disorder and mood disorders Definition and treatment of obsessive compulsive disorders (obsession, compulsion, obsessive compulsive spectrum, etc.). Eating disorders. Mood disorders (depression with main symptoms), major depression, cyclothymia, bipolar disorders. Pharmacological and psychotherapeutic treatment of mood disorders. Suicide	
3) Psychosis, Personality Disorders and Elements of Psychopharmacology Delusions, hallucinations and illusions. Formal thought disorders, treatment and symptoms of schizophrenia, classification and treatment of personality disorders. Psychopharmacology.	

CLINICAL PSYCHOLOGY (2 ECTS)

Dr Anna Meneghelli	Psychologist and psychotherapist. Freelancer, worked for many years as a consultant at Niguarda Hospital in Milan. Founding member of the Italian Society of Behavioural Medicine, Psychophysiology and Health Psychology. Founding member of the Italian Association for Early Intervention in
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	<p>Psychosis. Member of the AIAMC Board, of the International Board WAPR, of the International Collegium Activitatis Nervosae Superioris, Member SIEP, SIPP, ISPS, SPR. President of AIAMC and from 1996 to 1998 President of ASIPSE.</p> <p>E-mail: annameneghelli@tiscali.it</p>
Dr Tatiana Torti	<p>Cognitive-behavioural psychologist and psychotherapist. Tatiana Torti has been a lecturer at the Faculty of Psychology of the University of Aquila and the Vita-Salute San Raffaele University in Milan. She is a member of the Italian Association for Behaviour Analysis and Modification (AIAMC), a member of the Association for Behavior Analysis International (ABAI) and of the European Association for Behavioral and Cognitive Therapies (EABCT). She is the author of international scientific publications.</p> <p>E-mail: tatiana.torti@hunimed.eu</p>
Objectives	<p>Outline the basic concepts of the psychological models underlying behaviour, with a focus on the relationship dynamics of the physiotherapist with patients and caregivers.</p>
Teaching methods	<p>Lectures and classroom discussions</p>
Teaching material	<p>Slides presented during the lecture, available to physiotherapy students on LMS</p>
<p><u>Content Dr Meneghelli</u></p> <p>1) Introduction and cognitive behavioural model Definition of psychology. Overt and covert behaviour. Types of behaviour (motor, emotional and verbal). Measures of behaviour. Essentials of the cognitive behavioural approach, experimental models (classical conditioning, operant conditioning, social learning, human information processing, cognitive paradigm). Assertiveness training, conditioned response, exposure and counterconditioning. Systematic desensitisation.</p> <p>2) Operant conditioning Positive and negative reinforcement, punishment, extinction, shaping, small group exercises</p> <p>3) Cognitive paradigm Cognitive behavioural therapy, egosyntonic and egodystonic, neurobiological bases and psychological constructs of thought and its alterations</p> <p>4) Cultural conditioning Beliefs (opinions, assumptions and rules), irrational ideas, empathy. Cognitive therapy and the therapeutic relationship</p> <p>5) Assertiveness training Definition of assertiveness, verbal and non-verbal skills, cognitive skills and small group exercises</p> <p><u>Content Dr Torti</u></p> <p>1) Social communication and the therapeutic relationship The circular model of communication; the five axioms of communication; communication plans (types, advantages and disadvantages); the therapeutic relationship.</p> <p>2) Emotions</p>	

Primary emotions: definition, purpose, nature (example of fear and brain pathways for processing fearful stimuli); role of imaginative exercises and virtual reality in rehabilitation practice; role of intuition; duration of emotions and recovery function; types of emotions.

3) The emotional brain

Brain power and control system, the tripartite brain; primordial emotions: panic; fear and the attack-flight-immobilisation reaction; two-dimensional model of anxiety according to N. McNaughton & F. Corr; the limbic system; voluntary muscles and emotional control; facial feedback hypothesis; lateralisation of emotions; emotions and memory.

4) Emotional intelligence (E.I.)

Definition, Alexithymia, EQ in health professions, differences between IQ and EQ; EQ skills; components of self-control; example of training to increase EQ; anger control; EQ age and gender, EQ and empathy; emotional regulation strategies.

5) Emotional negotiation

The 5 primary needs or requirements: appreciation/understanding, affiliation, status, role, autonomy.

6) Cognitive-behavioural aspects of pain

Pain and classical and operant conditioning, pain and reinforcement; a biopsychosocial assessment model.

7) Factors influencing treatment outcome

Self-efficacy, therapeutic alliance and treatment adherence, expectations and placebo effects, meditation as a behavioural intervention for pain.

CHILD NEUROPSYCHIATRY (1 ECTS)

Dr Maria Nobile	Psychiatrist and Child Neuropsychiatrist, Head of the SSD of 'Psychopharmacology and developmental psychotherapy with cognitive-behavioural approach' and of the 'Residential Therapeutic Rehabilitation Service for Children with complex disabilities', Health Researcher in developmental psychopathology at the Scientific Institute IRCCS 'E.Medea', Bosisio Parini (LC). E-mail: maria.nobile4@gmail.com
Objectives	Present the main behavioural disorders of children and adolescents in order to provide the physiotherapist with the tools to recognise behaviours that deserve neuropsychiatric investigation.
Teaching methods	Lectures and classroom discussions
Teaching material	Slides presented during the lecture, available to physiotherapy students on LMS
Content	
1) Autistic spectrum disorders Autistic disorder, Asperger's syndrome, disintegrative disorder, Rett's syndrome. Pervasive developmental disorders not otherwise specified.	
2) Attention deficit hyperactivity disorder	

Aetiology, classification, diagnosis and treatment of attention deficit hyperactivity disorder. Behavioural disorders (oppositional defiant disorder, conduct disorder, etc.).

3) Anxiety disorders

Anxiety and panic in children and adolescents. Post-traumatic stress disorder. Selective mutism

4) Mood disorders

Depressive Disorder, Disruptive Mood Dysregulation Disorder, Assessment and treatment of bipolar disorder in developmental age

5) Obsessive compulsive disorder in children and adolescents

Aetiology and treatment of obsessive compulsive disorders in children and adolescents.

Tic disorders in children and adolescents (motor and vocal). Pharmacological and psychotherapeutic treatment of transient tic disorders and Tourette's syndrome.

CLINICAL NEUROPSYCHOLOGY (2 ECTS)

Dr Paolo Amami	Master's degree in Clinical Psychology and Neuropsychology. Specialisation in Cognitive-Behavioural Psychotherapy and PhD in Cognitive Neuroscience. 1st level EMDR (Eye Movement Desensitization and Reprocessing) certification. From 2010-2015 Laboratory of Neuropsychology, Movement Disorders Operational Unit, IRCCS Istituto Neurologico C. Besta. Currently adjunct professor at Humanitas University and consultant neuropsychologist at the Neurology Unit, Istituto Clinico Humanitas. E-mail: paolo.amami@humanitas.it
Objectives	The course aims to introduce the student to neuropsychology. In particular, to acquire knowledge of the phenomenology of the main signs and symptoms of clinical neuropsychology that can be seen in patients undergoing rehabilitation.
Teaching methods	Lectures and classroom discussions
Teaching material	Slides presented during lecture, available to physiotherapy students on LMS Lineamenti di neuropsicologia clinica (2011), Grossi D and Trojano L, Carocci Editore: chapters: 3, 4, 5, 6, 7, 8, 9, 11, 12, 13
Content	
1) Clinical neuropsychology Introduction to clinical neuropsychology: the study of the mind in relation to the brain	
2) Apraxia Neurophysiological basis, clinical description and treatment principles of motor planning disorders	
3) Visual-spatial disorders Neurophysiological basis, clinical description and treatment principles of spatial perception disorders	
4) The body scheme Neurophysiological basis, clinical description and treatment principles of body representation disorders	

5) Agnosia

Neurophysiological basis, clinical description and treatment principles of visual perception disorders

6) Attention disorders

Neurophysiological basis, clinical description and treatment principles of attention disorders

7) Neuropsychological disorders from frontal lobe injury

Neurophysiological basis, clinical description and treatment principles of executive dysfunction derived from frontal lobe injury

8) Neuropsychology of emotions

Neural basis, clinical description and treatment principles of emotional disorders

9) Aphasia

Neurophysiological basis, clinical description and treatment principles of speech disorders

10) Amnesia

Neurophysiological basis, clinical description and treatment principles of memory disorders

Examination for the Behavioural Disorders course. Written examination with multiple-choice questions on all the modules of the course (Chairman of the Examination Committee: Prof. Giampaolo Perna).