



## SUBJECT OUTLINE

### 1. Programme of study description

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|------|---|
| 1.1. | THE "CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY                          |
| 1.2. | THE FACULTY OF MEDICINE / THE PRECLINICAL DEPARTMENT 3 (Complementary Sciences) |
| 1.3. | DISCIPLINE Medical Psychology   |
| 1.4. | DOMAIN OF STUDY: Healthcare – regulated sector within the EU                    |
| 1.5. | CYCLE OF STUDIES: BACHELOR'S DEGREE   |
| 1.6. | PROGRAMME OF STUDY: MEDICINE  |

### 2. Subject description

|                    |  |               |   |                         |                            |                             |                           |
|--------------------|--|---------------|---|-------------------------|----------------------------|-----------------------------|---------------------------|
| 2.1.               | Name of the subject/compulsory subject/elective subject within the discipline: Human Behavioral Sciences (English) |               |   |                         |                            |                             |                           |
| 2.2.               | Location of the discipline: Faculty of Medicine  |               |   |                         |                            |                             |                           |
| 2.3.               | Course tenured coordinator: Ovidiu Popa-Velea  |               |   |                         |                            |                             |                           |
| 2.4.               | Practicals tenured coordinator: Liliana Diaconescu   |               |   |                         |                            |                             |                           |
| 2.5. Year of study | 2  | 2.6. Semester | 2 | 2.7. Type of assessment | Written and practical exam | 2.8. Subject classification | Complementary, obligatory |

### 3. Total estimated time (hours/semester of didactic activity) – teaching module

|   |          |                      |   |            |   |
|---|----------|----------------------|---|------------|---|
| Number of hours per week  | 3        | Out of which: course | 1   | Practicals | 2   |
| Total number of hours from curriculum   | 42       | Out of which: course | 14<br>(7 biological track,<br>7 psychosocial track) | Practicals | 28<br>(7 biological track,<br>21 psycho-social track) |
| Distribution of allotted time   | 14 weeks |                      |   |            | Hours   |
| Study from textbooks, courses, bibliography, and student notes                  |          |                      |   |            |   |
| Additional library study, study on specialized online platforms and field study |          |                      |   |            |   |
| Preparing seminars / laboratories, assignments, reports, portfolios and essays  |          |                      |   |            |   |
| Tutoring  |          |                      |   |            |   |
| Examinations  |          |                      |   |            |   |
| Other activities  |          |                      |   |            |   |
| Total hours of individual study   |          |                      |   |            |   |
| Number of credit points   |          |                      | 2   |            |   |

### 4. Prerequisites (where applicable)

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|----------------------|---|
| 4.1. of curriculum   | Acquirement of the notions taught in the first year of study at the course of Health Psychology and Medical Communication   |
| 4.2. of competencies | Acquirement of the communication skills with the somatic / psychosomatic patient, of the abilities to evaluate the weight of psychological factors in the etiology of somatic diseases and of the addressability criteria to the clinical psychologist / psychiatrist (taught in the first year at the course of Health Psychology and Medical Communication) |

### 5. Requirements (where applicable)

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| 5.1. for delivering the courses                         | Media projector, loudspeakers           |
| 5.2. for delivering the practicals / clinical rotations | Amphitheater at the Faculty of Medicine |

### 6. Acquired specific competencies

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| Professional | At the end of the course the student must: |
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| <b>competencies (expressed through knowledge and skills)</b>                        | <ol style="list-style-type: none"> <li>1. have the ability to identify the descriptors of normal and pathological behavior and of the appropriate orientation of the patient, in order to obtain the most favorable prognosis.</li> <li>2. Know the origins of normal and abnormal behavior, and their connection with personality and other variables.</li> <li>3. Know the different theories regarding behavior and its assessment tools, as well as intervention methods, focused on behavior change.</li> <li>4. Have the ability to understand the origin of harmful behaviors, the way in which they create illness and their effects in clinical terms;</li> <li>5. Know the behavioral changes in different special clinical circumstances (incurable diseases, surgical interventions) and the most effective methods of addressing them by the doctor.</li> <li>6. Raise awareness of the importance of some key concepts of Medical Sociology (e.g., social stratification, social inclusion, cultural competence, diversity) and their relationship with health.</li> <li>7. Have the ability to deepen on their own the concepts of Human Behavior Sciences learned and their creative application in a clinical context.</li> <li>8. Know psychotherapeutic techniques effective in modulating behavior, as well as their indications.</li> <li>9. Have in-depth knowledge related to the principles of hormone-behavior interrelationships, as well as related to the intervention of hormones in the life cycle.</li> <li>10. Have fundamental notions related to the involvement of hormones in sexual behavior and sexuality.</li> <li>11. Possess basic knowledge related to the involvement of hormones in eating behavior, as well as in hydro-electrolytic balance.</li> <li>12. Have the ability to understand the interrelationship between hormones and stress.</li> </ol> |
| <b>Transversal competencies (of role, of professional and personal development)</b> | <ol style="list-style-type: none"> <li>1. Efficient use of informational resources in Behavioral Sciences, with the ability to compile / edit specialty materials on current themes in the field</li> <li>2. Identification of roles / responsibilities tangent to the psychological assistance in the multidisciplinary care team</li> <li>3. Increase of the ability to solve problems, including the management of psychotherapy resources;</li> <li>4. The ability to use a medical language, specific for the hormonal determinism of behavior, both in the relationship with patients and colleagues.</li> </ol>   |

#### 7. Subject learning objectives (based on the scale of acquired specific competencies)

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|--|---|
| <b>7.1. General learning objectives</b>  | To acquire knowledge about the normal and pathologic behavior (its origin, the connection with personality and other variables, behavioral changes in special clinical circumstances), as well as the ability to use these knowledge in counseling and psychotherapy.   |
| <b>7.2. Specific learning objectives</b> | Knowledge of the connection between behavior and personality, the defining elements of normal and pathological behavior. Conceptual analysis of behaviors harmful to health, viewed from an etiopathogenic, clinical, psychometric and therapeutic perspective. The acquisition of theoretical elements, but also of practical skills in relation to the behavior in difficult clinical situations (the incurable patient, the surgical patient). Integrating the elements of Medical Sociology with those of Medical Psychology, for the provision of efficient and personalized medical services. Knowledge of effective psychotherapeutic techniques in modulating behavior, as well as their indications. |

#### 8. Content

| 8.1. Course   | Teaching methods | Observations |
|---|------------------|--------------|
| <b>1. Introduction to human behavior</b><br>Behavior and personality, theoretical models of behavior, normal-pathological separation criteria, variables that influence behavior (biological, psycho-social and cultural), methods of studying behavior<br><b>Risk behaviors (alcoholism, smoking, drug use)</b><br>Risk factors, explanatory theoretical models, clinical manifestations, methods of therapeutic intervention  |                  | 2 hours      |
| <b>2. Behavior in difficult clinical circumstances</b><br><b>a) Incurable patients</b><br>Psychological reactions to death and suffering and factors influencing them. Palliative care (characteristics, models, key concepts: e.g. "death with dignity", "unmet needs", "creating legacies"), actors and institutions providing palliative care (e.g., case manager, hospices). Psychological care of palliative patients: characteristics and ethical dilemmas (e.g., euthanasia and medically assisted suicide). The role of hope in incurable patients.<br><b>b) Surgical patients</b><br>Characteristics of the therapeutic relationship in surgery. Psychological reactions and |                  | 2 hours      |



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| behaviors of surgical patients. Effective psychological care for surgical patients.  | Interactive teaching, according to the syllabus, examples of clinical cases, including with the help of multimedia software (Prezi®, Powerpoint®). |                     |
| <b>3. Key concepts of Medical Sociology and their relationship with health</b><br>The Role of Medical Sociology in better understanding disease and treatment-related behavior. The importance of group membership for health representations and derived behaviors. The relationship between social stratification and health/illness. Cultural differences in the interpretation and expression of suffering. Social inclusion and health. Cross-cultural differences influencing the doctor-patient relationship. The concept of "physician's cultural competence". |  | 2 hours             |
| <b>4. Modalities of behavioral intervention</b><br><b>Psychotherapy (PT): effects on patients, doctors and patients' caregivers</b><br>Short-term objective-centered psychotherapy, transactional analysis, group and family therapy, art-therapy, narrative medicine (definitions, theoretical foundations, indications, efficiency).   |  | 2 hours             |
| <b>5. Principles of hormone-behavior interrelationships.</b><br>Hormones and the life cycle. The optimum concentrations of hormones in behavioral determinism. The role of hormones in growth, pubertal sexualization and pregnancy, hormones and aging. Hormones and sleep.   |  | 2 hours             |
| <b>6. Food behavior. Hydro-electrolytical balance and liquid ingestion</b><br>Hypothalamic nuclei with a role in regulating food behavior. Orexigenic and anorexigenic hormones. Hormones involved in the maintenance of hydro-electrolytical balance.   |  | 2 hours             |
| <b>7. Stress and the role of hormones in stress</b><br>Definition of stress. Hormones involved in stress response: catecholamins, hormones of the hypothalamo-pituitary-adrenal axis. Regulating factors of hormonal response to stress. Stress in the causality of diseases.  |  | 2 hours             |
|  |  |                     |
| <b>8.2. Practicals</b>   | <b>Teaching methods</b>  | <b>Observations</b> |
| <b>Practical 1. Human behavior – a biopsychosocial complex with implications for preserving or modifying health</b><br>Behavior and personality. Theoretical models. Normal and pathological behavior (discussions and clinical examples).   | Interactive teaching using psychological tests, case presentations, literature data, including multimedia use (Powerpoint®)                        | 2 hours             |
| <b>Practical 2. Biological bases of behavior</b><br>The genes-environment-behavior interaction; neuroanatomical, neurophysiological and biochemical bases of behavior. Clinical examples.  |  | 2 hours             |
| <b>Practical 3. Variables that influence behavior: the influence of gender, age, socio-cultural environment</b><br>Clinical applications: cognitive ability testing in the elderly (MMSE), Green's test for the evaluation of post-menopausal behavioral changes, the interview / questionnaire to detect the degree of perceived social support.  |  | 2 hours             |
| <b>Practical 4. Risk behaviors (1)</b><br>General concepts: substance abuse, addiction.<br>Alcohol consumption. Methods of evaluation and psychotherapeutic approach to alcoholism (examples of clinical cases).   |  | 2 hours             |
| <b>Practical 5. Risk behaviors (2)</b><br>Algorithm for approaching patients who intend to quit smoking. Therapeutic approach to drug addicts (1h)<br><b>Seminar recovery (1h)</b>   |  | 2 hours             |
| <b>Practical 6. Behavior in difficult clinical circumstances (1)</b><br>Psychological reactions to death and suffering (examples). Palliative care - challenges and difficulties. Modern models of palliative healthcare. The role of the therapeutic team in the medical assistance of incurable patients (clinical examples). Psychological assistance of palliative patients. Characteristics and ethical dilemmas of palliative patients (e.g., euthanasia and medically assisted suicide). The role of hope in incurable patients (clinical examples, interview). |  | 2 hours             |
| <b>Practical 7. Behavior in difficult clinical circumstances (2)</b><br>Psychological characteristics of surgical patients. Case studies.  |  | 2 hours             |
| <b>Practical 8. Medical Sociology (1).</b><br>The importance of Medical Sociology for understanding the attitude towards illness and treatment (discussions and clinical examples). The shaping role of behavior played by group membership (clinical examples). The relationship between social stratification and  |  | 2 hours             |



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|---|--|---------|
| health/illness (discussions). Social inclusion and health (discussions). Social role and perspective on suffering (discussions). Stigmatization in the social environment (discussions and clinical examples).  |  |         |
| <b>Practical 9. Medical Sociology (2)</b><br>Cultural differences in the interpretation and expression of suffering. (video examples). Transcultural differences that influence the doctor-patient relationship (discussions). The concept of "physician cultural competence" (clinical examples). Ways of social intervention to improve the perception of the disease and increase adherence to treatment (discussions, clinical examples). |  | 2 hours |
| <b>Practical 10. Psychotherapy, an additional element of medical intervention focused on changing abnormal and risky behaviors (1)</b><br>Short-term goal-focused therapy. Group and family therapy. Transactional analysis (theoretical principles, clinical examples).  |  | 2 hours |
| <b>Practical 11. Psychotherapy, an additional element of medical intervention centered on changing abnormal and risky behavior (2)</b><br>Art-therapy. Narrative medicine (theoretic principles, clinical examples).  |  | 2 hours |
| <b>Practical 12. The evaluation of sexual behavior at patients with endocrine pathology</b>   |  | 2 hours |
| <b>Practical 13. The evaluation of food behavior at patients with endocrine pathology</b>   |  | 2 hours |
| <b>Practical 14. The evaluation of behavior derived from disturbances of the hydro-electrolytical balance, as well from stress response, at patients with endocrine pathology</b>   |  | 2 hours |

#### Bibliography for course and practicals

##### 1. (MANDATORY)

Popa-Velea, O. (2015). "Behavioral Sciences in Medicine". Bucharest: Carol Davila University Press

- vol.1: pag.11-42, 58-159, 217-249;

- vol.2: 381-421, 450-457, 502-543, 565-584.

##### 2. (OPTIONAL) French, D., Vedhara, K., Kaptein, Ad, A., Weinman, J. (2010). „Health Psychology” (2nd Edition). London: BPS Blackwell.

- „The role of behaviour in health” (pag.13-32);

- „Alcohol and drug use” (pag.73-83);

- „Smoking” (pag.33-46);

- „Intervention to change health-related behaviour patterns” (pag.99-110).

##### 3. (OPTIONAL) Ouimet Perrin, K., Sheehan, C.A., Potter, M.L., Kazanowski, M.K. (Eds.). (2011). „Palliative Care Nursing: Caring for Suffering Patients”, London: Jones & Bartlett Learning International.

- „The nature of suffering and palliative care” (pag.1-24) (by Kazanowski, M.K., Ouimet Perrin, K.)

##### 4. (OPTIONAL) Brannon, L., Feist, J., Updegraff, J.A. (2012). “Health Psychology: An introduction to behavior and health” (8<sup>th</sup> Edition) (2013). London: Cengage Learning, cap. 12 (“Smoking Tobacco”) (pag.282-309), cap.13 (“Using Alcohol and Other Drugs”) (pag.310-340).

##### 5.(OPTIONAL) Grassi, L., Caruso, R., Sabato, S., Massarenti, S., Nanni, M.G., The UniFe Psychiatry Working Group Coauthors (2015). Psychosocial screening and assessment in oncology and palliative care settings, Frontiers in Psychology, 5: art.1485, pag.1-6.

9. Corroboration of the subject content with the expectations of the representatives of the epistemic community, professional associations, and major employers in the field of the programme of study

The appropriate formation at this course offers the premises for a good comparative knowledge of the role of biological and psychosocial factors in influencing human behavior, for a personalized approach of critical patients (especially in Oncology and Surgery) and for a nuanced application of psychotherapeutic techniques.

#### 10. Assessment

| Type of activity | Assessment criteria   | Assessment methods   | Assessment weighting within the final grade |
|------------------|---|--|---|
| Course           | Knowledge of theoretical notions taught at the course                 | Written exam: 25 questions (one correct variant out of five)                             | 85%   |
| Practical        | Knowledge of the practical applications exemplified at the practicals | Written exam with the teaching assistant: 15 questions (one correct variant out of five) | 15%   |



**The "Carol Davila" University of Medicine and Pharmacy Bucharest**  
**The Quality Assurance Commission**

|  |                           |  |
|--|---------------------------|--|
|  | Attendance at the seminar | Fulfilling the criterion of min.70% attendance |
| <b>Minimum performance standard</b>                                      |                           |  |
| Correct answer at min.30% of exam questions and passing the seminar exam |                           |  |

**Date of filing**  
**28.09.2022**

**Signature of the course**  
**tenured coordinator**

**Signature of the seminar tenured**  
**coordinator**

**PSYCHOSOCIAL TRACK**  
**Associate Professor Dr Ovidiu Popa-Velea**

**PSYCHOSOCIAL TRACK**  
**Senior Lecturer Dr Liliana Diaconescu**

**BIOLOGICAL TRACK**  
**Professor Dr Cătălina Poiană**

**BIOLOGICAL TRACK**  
**Teaching Assistant Cucu Constantin**

**Date of approval in the**  
**Council of the Department:**

**Signature of the Head of the Department**