

## 26788 - Learning and improvement of clinical reasoning

### Syllabus Information

**Academic year:** 2023/24

**Subject:** 26788 - Learning and improvement of clinical reasoning

**Faculty / School:** 104 - Facultad de Medicina

**Degree:** 304 - Degree in Medicine

**ECTS:** 5.0

**Year:** 5

**Semester:** First semester

**Subject type:** Optional

**Module:**

### 1. General information

Subject taught entirely in the Digital Teaching Ring (Anillo Digital Docente) ([www.add.unizar.es](http://www.add.unizar.es)) aimed at developing the competence of clinical reasoning (CR):

- To know the CR process, a crucial element of clinical practice and professionalism.
- To identify biases that may influence this process, compromising patient safety.
- To acquire skills to improve the CR process in clinical interviewing, diagnostic test management and prescription.
- To facilitate learning tools and continuous improvement of CR in its diagnostic and therapeutic stages, integrating acquired knowledge and clinical experiences lived in the earliest and most effective way possible, and for the rest of the continuous training.

It is aligned with the Sustainable Development Goals of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>) SDG 3 and 4, specific objectives 3.c, 3.d and 4.c

### 2. Learning results

1. To know the analytical and non-analytical cognitive models.
2. To know the most frequent potential cognitive errors in the CR process (from the initial evaluation, through the in-depth anamnesis, the interpretation of clinical signs or symptoms, the interpretation of complementary tests, to diagnostic closure and therapeutic selection).
3. To know the methodology of the CR process developed through the patient-physician interview by means of the design of scripts of the main diagnostic categories.
4. To know the importance of the management of complementary tests in the CR process.
5. To know the importance of reasoned prescribing when handling the resolution of a clinical case.
6. To become aware in their reasoning process of the cognitive models they use through learning scenarios of clinical reasoning (LSCR).
7. To become aware of potential cognitive errors in their reasoning process through LSCR
8. To become aware of the use of complementary tests and reasoned prescribing through LSCR
9. To demonstrate competency in the process of reasoning through the personal elaboration of a Final LSCR.
10. Specify the improvements of their reasoning process based on the reflection of the LSCRs developed in the term.

### 3. Syllabus

8 Conceptual modules:

Module 1: CR concepts and models.

Module 2: CR and patient safety.

Module 3: CR improvement activities.

Module 4: CR in the consultation room: doctor-patient interview.

Module 5: CR and complementary tests.

Module 6: Decision-making for prudent prescribing.

Module 7: Professionalism and continuous improvement of the CR process.

Module 8: Analysing overdiagnosis and overtreatment from CR.

9 Clinical scenario simulation modules:

LSCR 1, LSCR 2, LSCR 3, LSCR 4, LSCR 5, LSCR 6, LSCR 7, LSCR 8

Development by the student of a Final LSCR.

#### 4. Academic activities

Access the subject in the ADD will allow the student to view and download documents, links, videos to prepare the modules; communicate with teachers and colleagues through the discussion forums of each module, developing:

- 50 hours of lectures, problems and cases, participation in forums to answer questions from teachers (teaching work) and group work on clinical cases (special practices)
- 50 hours of personal study and tutorials through forums and messaging from teachers
- 2.5 hours of Evaluation

#### 5. Assessment system

The subject consists of 8 theoretical modules and 8 practical modules.

Each module has a task to be performed by the student (comment on an article, watch a video and comment on it, perform the analysis of a clinical case). At the end of each module, the student must: have participated in the discussion forum by answering the questions posed by the teacher at least once; have completed and uploaded to the platform the module homework and passed the multiple-choice exam with 60% of correct answers (10 questions per module with 4 options, one true, no negatives: total 80 questions). Once the exam is passed, the materials for the next module will be activated.

The practical modules consist of solving 8 clinical CR learning scenarios (CRAs) to train competency and be prepared to develop their own final subject scenario from their personal experience with the CRA format

Each content is evaluated on a range of 1-3 and the grade is weighted according to a percentage of weight assigned to each activity:

- Participation in the forums (at least one participation in each forum): 16 %
- Module tasks: 24%
- Passing the module tests: 24%.
- LSCRs: 24%
- Completion of the Final LSCR: 12%