

## Module Layout COS522 / Learning and Memory in Humans

|   |  |                                     |                   |
|---|--|-------------------------------------|-------------------|
| <b>Faculty</b>  | ΣΓΕΕ   | Faculty of Pure and Applied Science |                   |
| <b>Programme of Study</b>                               | COS  | M.Sc. in Cognitive Systems          |                   |
| <b>Module</b>   | COS522   | Learning and Memory in Humans       |                   |
| <b>Level of Study</b>                                   | <b>Undergraduate</b>                                 |                                     | <b>Graduate</b>   |
|   |  | <b>Master</b>                       | <b>Doctoral</b>   |
|   |  | X                                   |                   |
| <b>Language of Instruction</b>                          | English  |                                     |                   |
| <b>Mode of Delivery</b>                                 | Distance   |                                     |                   |
| <b>Module Type</b>                                      | <b>Required</b>                                      |                                     | <b>Electives</b>  |
|   |  |                                     | X                 |
| <b>Number of Group Consulting Meetings</b>              | <b>Total</b>   | <b>Physical Presence</b>            | <b>Online</b>     |
|   | 12 + 1 revision                                      | -                                   | 12 + 1 revision   |
| <b>Number of Assignments</b>                            | 1 Assignment / Project and 12 Interactive Activities |                                     |                   |
| <b>Final Grade Calculation</b>                          | <b>Interactive Activities</b>                        | <b>Assignment / Project</b>         | <b>Final Exam</b> |
|   | 24 %   | 26 %                                | 50 %              |
| <b>Number of European Credit Transfer System (ECTS)</b> | 10   |                                     |                   |

### Module Description

The module focuses on basic conceptualizations and processes of memory and learning. The students will acquire knowledge of theoretical accounts of memory structures and processes and their relevance and implications for primarily cognitive learning. Topics include types of memory (short-term, long-term, procedural, episodic, semantic), types of knowledge acquired (conceptual, declarative, procedural) and kinds of learning (association, generalization, implicit, explicit, transfer). In addition, principles of memory (assimilation, structuring, restructuring, encoding specificity, and levels of processing) and memory processes (encoding, activation, and retrieval) are discussed in relation to learning mechanisms and outcomes. The students will (a) apply this knowledge to comprehend, analyze, and evaluate the theoretical implications of recent psychological research in memory and learning; (b) synthesize and evaluate the potential of this knowledge in relation to computational problems and capabilities; (c) consider and propose methods of computationally testing theoretical claims and predictions.

### Pre-requisite Modules

### Co-requisite Modules

### Grading Scheme

| Assessment Method        | Percentage on Final Grade | Workload     |              |
|--------------------------|---------------------------|--------------|--------------|
|                          |                           | Hours        | ECTS         |
| Interactive Activities   | 24 %                      | 25-30        | 1            |
| Assignment / Project     | 26 %                      | 50-50        | 2            |
| Final/Repeat Examination | 50 %                      | 3            | -            |
| <b>Total</b>             | <b>100%</b>               | <b>Total</b> | <b>Total</b> |

### Grading Rules and Assessment methods

- Passing rate
  - 50% of the Interactive Activities
  - 50% of the Assignment / Project
  - Students are allowed to participate in the final exam of a Module if they have overall earned the minimum grade ( $\geq 50\%$ ) in both their Assignment / Project and Interactive Activities
  - 50% of the Final Exam

If a student earns a grade with decimal points, then it is rounded to the nearest half unit.