<table>
<thead>
<tr>
<th>COURSE TITLE</th>
<th>COSMOLOGY</th>
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<tbody>
<tr>
<td>Code</td>
<td>KBF: 105</td>
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<td>ISVU: 82135</td>
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<tr>
<td>Course teacher/s</td>
<td>Full professor Ivan Tadić, Ph.D.</td>
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<td>Assistants</td>
<td>Type of instruction (number of hours per semester)</td>
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<tr>
<td>Course status</td>
<td>Core course</td>
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<td>Percentage of e-learning implementation</td>
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**COURSE DESCRIPTION**

Course goals
Student should gain insight into the history of the universe and its understanding, a contemporary scientific view on its origin and interpretation.

Course enrollment requirements and core competencies
Having successfully completed the course a student should be able to:
1. Interpret the evolution of theories about the origin of the universe throughout the history.
2. Present main novelties causing the scientific shift.
3. Discern difficulties and new scientific theories of Galileo.
4. Interpret the Big Bang theory of the origin of the universe.
5. Briefly describe the main forces in the universe.
6. Describe the phenomenon of the expanding universe within its spatial form and density.

**Detailed course content (weekly class schedule)**

- Relationship between human and world (2);
- Presocratic Cosmologies (1);
- Plato's cosmology (3);
- Eudoxus and Calippus cosmology (2);
- Aristotle's view of the world (2);
- Ideas on heliocentric system of the world, the epicycle, the eccentric and the equant (1);
- Ptolemy (1);
- the scientific shift, in general (2);
- Nicolaus Copernicus (3);
- Tycho Brahe (1);
- Johannes Kepler (1);
- Galileo Galilei and contemporary views of the Church on this matter (3);
- Isaac Newton (1);
- contemporary cosmology (2);
- elementary particles and forces of the universe (1);
- spatial image of the world (1);
- the Big Bang Theory (3).

**Format of course instruction::**

- ☒ lectures
- ☑ seminars and workshops
- ☑ exercises
- ☑ on line entirely
- ☐ individual tasks
- ☐ multimedia
- ☐ mentorship work
- ☐ (other)

**Student obligations**
Regular class attendance and active participation

**Screening student work (specify portion in ECTS credits per each activity so that total number of ECTS credits corresponds to the ECTS credit value of the course)**

- Class attendance 1,0
- Research
- Practical training
- Experimental work
- Written representation
- (Other)
- Essay
- Seminar essay
- (Other)
- Mid-term exams 1,0
- Oral exam 0,5
- (Other)
- Written exam 0,5
- Project
- (Other)

**Grading and evaluation of student work in class and at the final exam**

Mid-term exam 50%
Final exam 50%

**Obligatory literature**

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<td>Number of</td>
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I year – winter semester INTEGRATED UNIVERSITY PHILOSOPHICAL-THEOLOGICAL STUDIES 34
### Supplementary Literature

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Year</th>
</tr>
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<tbody>
<tr>
<td>Filosofia del mondo. Cosmologia filosofica</td>
<td>F. Selvaggi</td>
<td>1985</td>
</tr>
<tr>
<td>Filosofia della natura</td>
<td>B. Van Hages</td>
<td>1983</td>
</tr>
<tr>
<td>L'universo nel tempo</td>
<td>P. Maffei</td>
<td>1982</td>
</tr>
<tr>
<td>Struktura znanstvenih revolucija</td>
<td>TH. S. Kuhn</td>
<td>2002</td>
</tr>
<tr>
<td>Dio e i cosmologi</td>
<td>S. L. Jaki</td>
<td>1991</td>
</tr>
<tr>
<td>Uvod u modernu kozmologiju i filozofiju</td>
<td>T. Petković</td>
<td>2001</td>
</tr>
<tr>
<td>Teologija i fizika</td>
<td>Simone Morandi</td>
<td>2012</td>
</tr>
</tbody>
</table>

### Quality Assurance Methods

- Lectures, consultations, student attendance register and participation in discussions, mid-term exam and final exam.

### Other (According to the Opinion of Education Provider)

- Copies in the library
- Other media