<table>
<thead>
<tr>
<th><strong>Level:</strong> PhD</th>
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<tbody>
<tr>
<td><strong>Course title:</strong> PhD study of Geoscience (Geography)</td>
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<tr>
<td><strong>Subject title:</strong> Global hydrology influences</td>
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<tr>
<td><strong>Status:</strong> elective</td>
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<tr>
<td><strong>ECTS:</strong> 11</td>
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<td><strong>Requirements:</strong> None</td>
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**Learning objectives**
Define the main regularities of hydrology processes and phenomena in global sea. Understanding the main hydrology terms and characteristics of the oceans and seas. The main goal is overview the global impacts of worldwide water areas (oceans and seas) on global climate and on the Earth in general.

**Learning outcomes**
Provide students with the knowledge of main phenomena in oceans. Acquire competences in causal analysis of issues related with hydrology processes and phenomena in oceans and its impacts on global natural processes.

**Syllabus**

*Theoretical instruction*
- Global sea – division and development
- Global sea – horizontal division
- Relief of the Global sea
- Salinity – horizontal and vertical division
- Optical properties of sea water
- Temperature of sea water
- Sea ice – spatial distribution, consequences of ice core melting
- Sea waves – genesis, dimension and impact on coast
- Sea currents – genesis, patterns in global sea, impacts on environment
- Tide and ebb – impacts on environment
- Temperature oscillation of Global sea – influences on air temperature, winds, precipitation patterns, etc.

*Practical instruction*
- Creation the patterns of ocean currents
- Preparation of the scientific paper

**Weekly teaching load**

<table>
<thead>
<tr>
<th>Lectures: 4</th>
<th>Exercises: 0</th>
<th>Other forms of teaching:</th>
<th>Student research:</th>
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Other: