

Course/module description (*Applications of Remote Sensing in land use and environmental engineering – Применение дистанционного зондирования в управлении землепользования и окружающей средой*)

Course provider (institution): Razzakov Kyrgyz State Technical University (KSTU)

Course title:

Applications of Remote Sensing in land use and environmental engineering (D.2.3.2)

Target group: PhD Students (620100 – Geodesy and Remote Sensing Direction. Geodesy and Geoinformation Technologies Program)

Type (compulsory/optional): Optional

Number of ECTS credits allocated (if applicable); estimated workload:

10 ECTS (300 academic hours)

Mode of delivery (face-to-face/ distance learning etc.); number of contact hours:

90 class hours (30 - lectures, 60 – labs) and 210 hours for the self study

Language of instruction: Kyrgyz/Russian/ English

Prerequisites and co-requisites (if applicable):

Course aims:

Learning outcomes:

After taking this course, the students should (be able to do):

1.

Course content:

1.

Recommended or required reading and other learning resources/tools:

- Course teaching materials available through the university ELMS;
- Instant messaging, blog and personal electronic communication platforms;

Required literature:

1. Метод и системы координат в геодезии. Н.А. Телеганов, Г.Н. Тетерин. Учеб. Пособие. Новосибирск: СГГА, 2008. 143 с.
2. Системы координат в геодезии. В. Л. Клепко, А. В. Александров. Научная монография, Екатеринбург 2011, 116 с.
3. Высшая геодезия. Учебник / Б. Т. Мазуров. Новосибирск: СГУГиТ, 2016. 203 с.
4. Map Projections. Erik W. Grafarend, Friedrich W. Krumm. Springer-Verlag Berlin Heidelberg 2006, 713 p.

Additional literature:

1. Высшая геодезия и основы координатно-временных систем: Контрольная работа № 1. Л.В. Огородова, Москва, 2017, 37 с.
2. Understanding Map Projections. Melita Kennedy. ESRI 2000, 112 p.
3. Map Projections: A Working Manual. John P Snyder. US GS, 1987, 394 с.

Planned learning activities and teaching methods:

1. Lectures and seminars;
2. Laboratory work and computing tasks;

3. Individual project work;
4. Class discussions.

Assessment methods and criteria:

1. Lab assignments and computing tasks (25%)
2. Participation in class activity (5)
3. Individual project (30%)
4. Final exam 40%

Grading system: Five-point academic grading system,
where 5 - "Excellent" and 2 - "Unsatisfactory" (A, B, C, F)

Additional information:

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