## Course title :

| Course Basic Information  |  |  |
|---|--|--|
| Academic Unit:  | Faculty of Civil Engineering                             |  |
| Course title:   | Basic Geoinformatics                                     |  |
| Level:  | Bachelor   |  |
| Course Status:  | Mandatory  |  |
| Year of Study:  | Year 1, Semester 1                                       |  |
| Number of Classes per Week:   | 2+2  |  |
| ECTS Credits:   | 6  |  |
| Time /Location:   | According to the Timetable                               |  |
| Teacher:  | Prof.Ass.Dr. Ymer Kuka                                   |  |
| Contact Details:  | ymer.kuka@uni-pr.edu                                     |  |
|   | +383 44 224 853  |  |
|   |  |  |
| Course Description:   | The course starts with the face of reality, comparisons  |  |
|   | and differences between space and time, knowledge of     |  |
|   | spatial data, basic knowledge on the coordinate systems. |  |
|   | Continues with sharing data of geo space based on the    |  |
|   | position, object and time. The course finishes with      |  |
|   | practical instruction in the use of GIS software.        |  |
| Course Goals:   | To achieved theoretical and practical knowledge in the   |  |
|   | basics of Geoinformatics and informatics, as well as     |  |
| Expected Learning Outcomes  | After completion of this course, will be able:           |  |
| Expected Learning Outcomes.   | After completion of this course, will be able.           |  |
|   | Develop knowledge of space and time                      |  |
|   | Develop knowledge of spatial data                        |  |
|   | Develop practical knowledge on informatics               |  |
|   | Develop knowledge on the use of GIS software             |  |
|   |  |  |
| Student Workload (should be in compliance with student's Learning Outcomes) |  |  |

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|---|-------|-----------|-------|
| Activity  | Hours | Day/ Week | Total |
| Lectures  | 2     | 15        | 30    |
| Theory/ Lab Work/Exercises  | 2     | 15        | 30    |
| Practical Work  |       |           |       |
| Study for intermediate test   | 1     | 13        | 13    |
| Consultations with the teaher   | 1     | 15        | 15    |
| Field Work  |       |           |       |
| Test, seminar paper   | 4     | 2         | 8     |
| Homework  | 1     | 13        | 13    |
| Self-study (library or home)  | 1     | 13        | 13    |
| Preparation for final exam  | 1     | 15        | 15    |
| Assessment time (test, quiz, final  |       |           |       |
| exam)   |       |           |       |
| Projects, presentations, etc.   | 1     | 15        | 15    |
| Total   |       |           | 152   |
|   |       |           |       |

| Teaching Methods: Assessment Methods: | <ul> <li>Lecture</li> <li>Discussion during lectures</li> <li>Exercises</li> <li>Work in group</li> <li>In evaluation, the percentage of the attendance of each partial evaluation in the final evaluation must be determined. One of the ways of evaluation would be:<br/>First Evaluation: 15%</li> <li>Second Evaluation: 15%</li> <li>Homework or other engagement: 10%</li> <li>Attendance 5%</li> <li>Final Exam 55%</li> <li>Total 100%</li> </ul> |  |
|---------------------------------------|---|--|
| Drimany Literature:                   | 1 CIS principles and aplications Maguira D L at al  |  |
| Filling Literature.                   | <ol> <li>GIS, principles and aplications Magure, D.J. at an<br/>(1991).</li> <li>GIS – a Computing Perspective, Worboys, M. (2003)</li> </ol>   |  |
| Additional Literature:                | www.ncgia.ucsb.edu  |  |
| Designed teaching plan                |   |  |
| Week                                  | Title of the Lecture  |  |
| Week 1:                               | The vision of reality and the separation of reality with elements   |  |
| Week 2:                               | Comparisons of space and time   |  |
| Week 3:                               | The difference between space and time   |  |
| Week 4:                               | Observations different for spatial data   |  |
| Week 5:                               | The proportion of geo space and position as the attribute   |  |
| Week 6:                               | Coordinate Systems in GIS   |  |
| Week 7:                               | Comparison of maps  |  |
| Week 8:                               | Sharing geo space based on the position   |  |
|                                       | First valuation   |  |
| Week 9:                               | Sharing geo space based on the object   |  |
| Week 10:                              | Sharing geo space based on the time   |  |
| Week 11:                              | Modeling absolute and relative  |  |
| Week 12:                              | Geometric spaces and their separation   |  |
| Week 13:                              | Fundamentals of the theory of graphs  |  |
| Week 14:                              | Basics of topology  |  |
| Week 15:                              | Using GIS software  |  |
|                                       | Second valuation  |  |

## Academic Policies and Code of Conduct

- Regular attendance of lectures and exercises

- Being quiet during the sessions
- Shutting down mobile phones
- Being on time

Note | If a student has more than 3 class assignements evaluated below 50% he/she loses the right on taking the final exam. Evaluation is done from 0-100 %.