COURSE SYLLABUS SEMESTER

| Name of Course | Geographic Information Systems 2. |
|-----------------------------|-----------------------------------|
| Course Code | MSB127ANEP |
| Allotment of Hours per Week | 1/0/1 |
| Number of Credits | 2 |
| Program | Civil Enginnering (BSc) |
| Evaluation | Course mark |
| Semester | Spring (4th) |
| Prerequisites | Geographic Information Systems 1. |
| Department | Civil Engineering |
| Instructor | Béla GADÓ |

INTRODUCTION, GENERAL COURSE DESCRIPTION

The aim of the course is to give both theoretical and practical overview of the significance, structure, usage, and development of a geographical information system. Towards that goal in this class, data will be collected with modern technologies, models will be created and analyzed for deducting further information.

LEARNING OBJECTIVES

Lectures:

1. Introduction

2. How does GIS work

3. Information organized into layers

4. Why Is GIS Unique

5. Top Benefits Of GIS

6. GIS Applications

7. Modern data acquisition technologies

8. Theoretical test

Lab classes:

1. QGIS: Complex spatial queries

2. QGIS: Complex spatial queries

3. QGIS: Contour lines from SRTM and volume calculation

4. QGIS: Catchment area and runoff modeling

5. 3D point cloud and modeling

ATTENDANCE AND GRADING

Attendance:

Attending is required all classes, and will impact the grade (max. 10%). Unexcused absences will adversely affect the grade, and in case of absence from more than 30% of the total number of lesson will be grounds for failing the class. To be in class at the beginning time and stay until the scheduled end of the lesson is required, tardiness of more than 20 minutes will be counted as an

absence. In the case of an illness or family emergency, the student must present a valid excuse, such as a doctor's note.

Grading: successful theoretical test (min 50%) and well-made semester assignment

Offered final grade:

Points are given in the following: 80p theory test + 20p assignment

| Evaluation in p | percents | Numeric grade |
|-----------------|----------|--|
| 85 p - 100 p | 100% | A (5, jeles,excellent,sehr gut) |
| 71 p - 84 p | 84% | B (4, jó, good, gut) |
| 60 p - 70 p | 70% | C (3, közepes, avarage, befriedigend) |
| 50 p - 59 p | 59% | D (2, elégséges, satisfactory, genügend) |
| 0 p - 49 p | 49% | F (1, elégtelen, fail, ungenügend) |

READINGS AND REFERENCE MATERIALS

SCHEDULE

| CHEDULE | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|-----------------|----------------------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-------------|----|----|----|----|--|
| | | STUDY PERIOD, #WEEKS | | | | | | | | | | | | | | | EXAM PERIOD | | | | | |
| 2021/2022. 2 | 2ND SEMESTER | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. | 14. | 15. | 1. | 2. | 3. | 4. | 5. | |
| | Lecture number | 1 | 2 | | 3 | | NH | 4 | | 5 | | SB | 6 | 7 | | 8 | | | | | | |
| | practice number | | | 1 | | 2 | NH | | 3 | | 4 | SB | | | 5 | | | | | | | |
| | Test | | | | | | | | | | | | | | | x | | | | | | |
| Semester assignment | punishing | | | | | | | | | | | | | x | | | | | | | | |
| | submitting | | | | | | | | | | | | | | | | x | | | | | |
| | Course mark | | | | | | | | | | | | | | | | х | | | | | |

NH – national holyday

SB – spring break

MASKING REQUIRED INDOORS

The University of Pécs requires masking indoors for both vaccinated and unvaccinated individuals per the following:

- Masks should properly cover both the nose and mouth.
- More protective surgical, KN95 or N95 masks are highly recommended; bandanas and gators are not permitted.
- Faculty may unmask while teaching if 4 m of distance is maintained. All students must always wear masks.
- Individuals may only remove masks indoors when:
 - \circ in an enclosed room alone.
 - actively eating or drinking.