Assessment GIS for WSE

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Assessment

- Scientific report
  - GIS procedure to delineate streams and catchments
  - Based on Chapter 4 (Catchment delineation)

Assessment

- **Scientific report,** no report of buttons that you pushed, no screenshots:
  1. Introduction (aim)
  2. Methods (flowchart of procedure + description of flowchart)
  3. Results (with illustrations → correct maps)
  4. Discussion
  5. Conclusions
  6. References
- Submit through eCampus, 1 **pdf file** (max 20 MB). Filename: GIS_NAME_studentnumber.pdf. Also mention student number and name in report
- Deadline: December 6 2019, 11:00pm
- It is not allowed to use ArcGIS!

Assessment

1. Introduction

- Assume you write the report for a policy maker
- Policy maker is not interested in the software or buttons you used, but wants to know the generic procedure
- In the introduction section, give the context and the aim of the study

Assessment

2. Methods

- In this section you include your flowchart of the procedure. A flowchart is a figure that shows the analysis steps in brief.
- In the text you describe the steps in more detail, without mentioning the software or buttons that you used, but the generic methodology
- Don’t present any (intermediate) results here, that will come in the results section
- Use info presented in lectures, but use your own words and search for additional references to explain the methodology

Assessment

3. Results

- Insert figures (maps) with a numbered caption
- In the text below the maps describe what can be seen on the map.
- Present at least maps of:
  - DEM
  - Flow direction
  - Final map with delineated catchment and streams
- Use an intuitive legend (see lecture on map design)
- Use appropriate legend types for boolean, discrete and continuous maps (**defaults are always wrong!**)

Assessment

4. Discussion

- Discuss the results in a scientific way:
  - What worked well?
  - What are strange results? Why?
  - How can the procedure be improved?

5. Conclusions

- Repeat the aims of the study that you mentioned in the introduction section
- Write down how the aims have been achieved by this study
- Give recommendations for the policy maker and recommendations for future studies

6. References

Mark criteria

1. Presentation	Possible score	Score	Remarks
Scientific structure of the report (Introduction, Methods, Results, Discussion, Conclusions, References)	10		• This is the general structure of scientific reports and papers • Pay attention to numbering
Maps with correct legend, units, north arrow, scale bar, intuitive colours	20		• Insert maps as figures in the text (export from GIS) • Defaults are always wrong (special attention to ArcGIS) • Discrete/continuous/boolean maps • Units • Interval of scale bar. Don't use scale values • Intuitive colours
2. Scientific quality			
Scientific introduction to the topic	10		• This is a scientific report, no self evaluation or software manual • Introduction should contain aims/objectives of the study • Don't call it an exercise
Correct flowchart	10		• Mention processes, not tools • Don't mention file names • Leave out details, only present the flow to the result • No start/end
Clear scientific description of methods, no software manual	10		• Methods should be described in detail. Here you can show what you have learned from the theory of the lectures • Don't present a software manual with screenshots
Clear description of results	10		• Describe the presented (intermediate) results in the text
Discussion of results	10		• This is where the science comes in. This section should critically reflect on the methods and the produced results. Do you see strange results? What can be improved? How?
Clear conclusion	10		• The conclusion section should respond to the aims/objectives defined in the introduction • Summarize the most important findings of this study
Adequate referencing	10		• Correct citing in tekst • Correct reference list