

## Sample Rubric (4-26-19) – InVEST Ecosystem Services Modeling Project

Ecosystem Services for Ecologists, course designed by Jennifer M. Archambault

**Process (20% of grade): the process of project conception, design, and implementation are important in developing understanding of the topic; thus, process is incorporated into your grade as outlined.**

- Website Exploration: demonstrate familiarity with the Natural Capital Project website and the particular InVEST model you were assigned by explaining your findings in a discussion forum post in our classroom Moodle space.
- Idea Generation: given your knowledge of the InVEST models available and working with your partner/group, select a location and pitch your idea the ecosystem service you will explore, which InVEST model you will use, and your justification for pursuing the project.
- Model Execution: Following the model instructions and guidelines, obtain publicly available data, use the InVEST models to quantify the ecosystem services under investigation, and generate results in usable form (i.e., tables/figures as appropriate for summarizing in final products, estimates of economic value if appropriate).
- Team Collaboration: works effectively with collaborators as demonstrated by creating a successful project, cohesive final products (written brief and oral presentation), and as judged by peer performance reviews.

**Quality of Understanding (50% of grade): understanding should be demonstrated within the Process and Performance products (listed in the sections above and below), especially within Idea Generation, Written Project Brief, and Oral Presentation.**

- Rationale: articulate why it makes sense to do the project; problem statement (what is the issue being addressed), what knowledge will be gained through your process ( i.e., state the purpose and objectives/aims of the project, justification, and make a convincing argument)
- Interpretation: interpret the model results for a general audience, making analogies if applicable, putting the quantified ES in terms that a non-technical audience will understand. Ability to translate the model for adequately general audiences demonstrates an in-depth understanding of the results.

- Application: apply results in context of scenarios (e.g., development, conservation/preservation, restoration)/ tradeoffs or shaping/informing a management decision or policy
- Reflective: recognize limitations of the results (what they do/don't say, what they don't address/include, whether they're generalizable or location/scale/scenario specific)
- Perspective: handle questions thoughtfully using principles of Ecosystem Services and knowledge gained from the modeling exercise.

**Quality of Performance (30% of grade): performance factors judge the products produced from your work, where exemplary work is polished and professional, and includes all the elements necessary reflect your level of understanding (see section above).**

- Written Project Brief: each student in the group will produce a succinct written product (~ 5 pages) that could be given to stakeholders to thoroughly explain all elements of project, including purpose, objectives, methods, results, interpretation of results, and their implications for management/policy; uses figures/tables effectively to convey main points; adheres to grammar and style conventions. This is to be your own work, using the results from the group modeling effort.
- Oral Presentation: the group will produce a 15 minute presentation (12 minute strict limit, plus 3 minutes for questions) that effectively explains all elements of project from purpose/objectives and rationale to interpretation of results and their implications for management/policy; adheres to good presentation design (as discussed, will provide resources/examples), adheres to time limit, polished presentation delivery, equity in contribution from all group members, handles audience questions appropriately, judged as understandable by audience members.