NRES776 Rubric for Project 1

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### Description

This project will make up 15% of your total grade. Base on a research dataset, you will draft a research proposal with research title, background, hypothesis, methods, and expected outcome. Make this project as a research proposal that you are going to apply funding with. There will be a 5-minutes presentation component as well as a 2-pages report.

### Guidelines

You could consider including one or more of the following analyses in your report:

* Data visualization
* Descriptive statistics
* Comparison of means
* Correlation

And you could consider one of the following as proposed research methods (we will cover these techniques in lectures):

* Multiple regression
* Generalized linear models
* Mixed-effect models
* Multivariate analyses

### Rubric

| Dimension | Qualities | Points |
| --- | --- | --- |
| Background | Concise background of the research topic, provide importance and/or the gap of knowledge | 20 |
| Hypotheses | List 1 - 3 hypothesis that you will be testing in the research question | 15 |
| Methods | Details of data collection, data visualization, and statistical methods you are considering using, etc. | 20 |
| Oral presentation | Clearly present your project as if you are applying for fundings to support your research project | 40 |
| Written report format | Written report in 2 pages and get submitted on time | 5 |
|  |  | TOTAL 100 |

### Datasets

You are highly encouraged to use your own dataset, so that this project can contribute to your thesis work. You can check with your supervisor about available data or find dataset online. Feel free to come checking with instructors about the suitability of the dataset. Here are some resources to find freely available dataset.

* [R palmerpenguins](https://allisonhorst.github.io/palmerpenguins/index.html)
* [Ecological Data Wiki](http://ecologicaldata.org/)
* [Amniote: life history of birds, mammals, and reptiles](http://www.esapubs.org/archive/ecol/E096/269/metadata.php)
* [EltonTraits 1.0: Foraging ecology of birds and mammals](http://www.esapubs.org/archive/ecol/E095/178/)

### Written project example

Yi-Chin (Sunny) Tseng. 2018. [Automatic Bird Sound Detection in Audio by Spectral Features](./docs/BirdID_vogel_Sunny_20180209.pdf).