



## **Biomimicry: Innovation Inspired by Nature** ASSIGNMENT RUBRICS

### **Assignment 1: Natural History Stories** (2.5% of final grade)

Chicken stamp = excellent

Snowflake stamp = good

- Provided 3 natural history stories
- Related each story to a potential biomimetic example
- Legible

### **Assignment 2: Deep Pattern & Local Champion Scavenger Hunt** (5% of final grade)

Part 1 & 2: (3% of final grade)

Full marks = 22 points

- Provided a brief (5 sentence max) and vivid description of local habitat (1)
- Legible & proper grammar/spelling (1)
- Provided 2 different examples for each of the 10 functions listed (20)
- Play points: noticed local champions and used strategy terms (form, process, system)

Part 3 : (2% of final grade)

Chicken stamp = excellent

Snowflake stamp = good

- Followed outlined instructions
- Selected only one function
- Described deep patterns
- Legible & proper grammar/spelling

### **Assignment 3: Learning From Nature** (5% of final grade)

Full marks = 18 points

- Provided the name of the organism/process
- Provided full magazine citation (magazine title, article title, volume, year, page numbers of entire article)
- Stated (in one sentence) the amazing feature of organism/process
- Provided one function & mechanism (if, available)
- Identified 2-4 industries that function could be used for
- Stated a captivating headliner
- Proper grammar/spelling & legible
- Completed all of above for two articles

### **Assignment 4: Translating Science** (7.5% of final grade)

Full marks = 10 points

Followed instructions carefully (3)

- Attached scientific abstract, title and full citation
- 12pt, double-spaced, 3pg (min) – 4 pg (max)
- Included a captivating title
- Had both fictional AND non-fictional aspects to article

### Article (5)

- Engaging writing style
- Scientific facts presented in an understandable way to a non-science audience
- Proper grammar
- Related science to a human problem

### Biomimetic design (2)

- Included a creative and fictional biomimetic design related to science facts
- Realistic and believable innovation
- Described design such that the reader had a clear vision of design

### **Overall journal (1<sup>st</sup> collection):** (5% of final grade)

Chicken stamp = excellent

Snowflake stamp = good

- Legible
- Making a concerted effort toward exploring biomimicry through journal
- Completed requested assignments in journal