Biology 489/589, Ecotoxicology **Spring 2020**

Monday, Wednesday & Friday, 1300-1350

Instru tor **Dr. Benjamin D. Duval**, benjamin.duval@nmt.edu

319 Jones Annex, 835-5820 (office)

ff ı Hours Monday 11-noon; Wednesday 11:00-noon

**pr r nt a appo nt nt*

t oo Newman, M.C. (2015) "Fundamentals of Ecotoxicology"

p v rs on on Canvas

tat st ıa oft ar **:** required for class, this is a free download

https://jasp-stats.org/download/

as r a

http://allendowney.blogspot.com/2016/06/bayesian-statistics-for-undergrads.html

Cours D s r pt bn

Biological evolution has always been constrained by the chemical environment. Learning about how organisms deal with, and are physiologically impacted by heavy metals and novel organic

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At t n o t ours ou s ou a to.

1. Understand differences between naturally occurring and anthropogenic contaminants and toxins
2. Understand physiological adaptations to both of the above
3. Perform simple statistical (preferably Bayesian) analyses on toxicological data, including QA/QC checks
4. Present literature review syntheses
5. Graphically present your own interpretation of original data

I expect a LOT from students enrolled in this course, and you will get out of it what you put in!

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Week 1: Intro to Ecotoxicology; History & Current State of Field (Chpt. 1)

Intro to ata s t Jan

Week 2-3: Classes of Contaminants (inorganic, organic, radiations) (Chpt. 2)

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Week 15: Large-scale Effects of Toxins: Ecosystems, Global Change and Risk Assessment (Selections from Chpt. 11-13)

Week 16: Final Data presentations
-Final Presentations Approx.