Course overview

FISH 507 – Applied Time Series Analysis

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Introductions

Who are we?

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Who are you?

What School/Dept/Program are you from?

What are you looking to get out this class?

Course format

Combination of lectures and labs

Hands-on exercises and R coding

Communications

We encourage lots of questions during class

Feel free to email any of the instructors outside of class

We will respond within 24 hours

Grading

Weekly homework (30% of total)

- Assigned Thurs at the end of computer lab
- Due by 11:59 PM the following Thurs
- Based on material from lectures & computer labs

Grading

Research project & paper (40% of total)

- Must involve some form of time series model(s)
- Due by 11:59 PM PST on March 14

Two anonymous peer-reviews (20% of total)

- One review each for 2 of your colleague's papers
- Due by 11:59 PM PST on March 18

Grading

Participation (10%)

- We expect you to show up and interact
- Please contact one of the instructors if you have any conflicts

Expectations for final project

- Research paper or thesis chapter that could result in a peer-reviewed publication
- Focus on applied time series analysis (univariate or multivariate)
- Short format similar to "Report" in *Ecology* or "Rapid Communication" in *CJFAS*
 - Max of 20 pages, inclusive of refs, tables, figs, etc
 - 12-pt font, double-spaced throughout

Don't have time series data?

- RAM Legacy
- RAM's Stock-Recruitment Database
- Global Population Dynamics Database
- NOAA NWFSC Salmon Population Summary
- · SAFS
 - Alaska Salmon Program
 - Lake Washington plankton

Ecological Forecast Challenge

The EFI RCN NEON Ecological Forecast Challenge is happening concurrently this course

You are welcome to do one of the challenges as your individual project (but you don't need to formally participate in the challenge)

All the data are provided and the challenge lays out the goals (what to forecast) for each challenge

The **Aquatic Ecosystems**, **Tick Abundance**, and **Beetle Abundance** challenges would be appropriate

Course topics