

Fish 404 Lab
Diseases of Aquatic Organisms

Class Coordinator Bryanda Wippel
Email bjtw@uw.edu
Phone 206-616-6341
Office FSH 234C

Lab: Thursday 2:30-4:50pm in FTR Rm 113

Attendance: This is a laboratory course so attendance is required. If you cannot attend lab because of illness or emergency, please notify me as soon as possible by email or phone.

Supplies Required:

- Lab coat
- Notebook to record notes, results, etc.

Grades: Lab section is worth 30 points of the total 100 points of your final grade

Participation: 2%

Notebook : 3%

Lab reports: 20%

Presentation: 5%

Lab Reports: Two word-processed lab reports are expected (see lab report grading guideline for specifics). The lab reports will follow standard scientific format: title, author, introduction, methods, results, discussion, and references. Four references from peer-reviewed journals are required. Reports are due by midnight on the due date. They should be turned in electronically via the class dropbox located on the home tab of the workspace. Late reports will be deducted 5% for each day late including weekends.

Lab Presentations: Each student is required to give a 10-minute power point presentation on an aquatic animal disease topic of their choice. Presentations will be given in lab section on **Thursday June 5**.

Presentations should include:

- Background information on your disease (ie: scientific and common names of pathogen and host along with its geographic range)
- Significance of your disease – who cares?
- Impacts on the host including clinical and histological signs of infections
- Methods for diagnosis
- Methods for control or preventative measures

Extra credit will be given if you choose a disease that has not been previously covered in lecture. Please either email your presentation prior to lab or bring it to class with you on a jump drive.

Notebook: A very important part of being a scientist is taking well-detailed notes during your experiments. When taking notes in lab ask yourself this: “Could I read and understand these notes years later in order to replicate this exact experiment?” If the answer is “Yes!” your notebook will receive full credit. **Lab notebooks will be graded during exam periods** so remember to bring them with you to class on those days.

Laboratory Rules:

1. Wash off desktops with disinfectant before and after each laboratory period
2. Wash hands at end of the laboratory period
3. Keep desktops clear of excess material
4. Wear a lab coat to protect your clothes and yourself
5. If material is spilled or glassware is broken, inform the TA immediately
6. Be cautious with Bunsen burners or open flames - keep paper towels and papers away from flame and tie up long hair
7. Absolutely **NO** open toed shoes or sandals
8. Absolutely **NO** food or drinks allowed in lab (this includes gum and/or water bottles)
9. Pay careful attention to the TA instructions on disposal of materials or special precautions for handling material

*Subject to change

Week	Day	Title	Tasks	Assignments
1	March 29	Intro Lab	Safety introduction General histology (healthy vs diseased)	
2	April 5	Case Study 1: WS in Abalone	Abalone anatomy Dissections. Try and quantify RLO using tissue squashes	
3	April 12	Case Study 1: WS in Abalone	DNA extractions	EXAM 1: Tues, April 22 – lab notebook due during lecture
4	April 19	Case Study 1: WS in Abalone	PCR (conventional) Examine histology	
5	April 26	Case Study 1: WS in Abalone	Run gels; qPCR Discuss results: gross vs histo vs cPCR	
6	May 3	EXAM 2	EXAM 2 – during lab session	lab notebook due during lab
7	May 10	Case Study 2:	EGWD	Lab report due: Case Study 1
8	May 17	Case Study 3: salmonid IHNV plaque assays	Fish dissection and analysis and quantification of a fish pathogen part 1; scan EGWD plants	
9	May 25	Quantifying fish pathogens	Quantify EGWD and IHNV plaques; Discuss mini lab report structure	Mini Lab report due Sunday May 27th by midnight: Case Study 2 or 3 part 1 (your pick)
10	May 31	Presentations	Lab oral presentations	