

# AQUATIC BIOLOGICAL INVASIONS

(BI/FW 421/521) CRN: 72575/72576/72577



**Plus...Undergraduate Research Credit in Marine and Estuarine Research (BI 401/CRN: 73198- FW 401/CRN: 73190)**

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## **BI/FW 421/521 – Aquatic Biological Invasions**

**4 Credits (M/F – 8 AM-12 PM, W 1-5 PM plus field trips, June 25 – Jul 20)**

The class will analyze major topics and events in invasion ecology through literature, discussions, seminars and hands-on / boots-on field trips by diverse approaches. Ecological and environmental history will be major emphases. Participants are encouraged to integrate their ongoing relevant research or interests into the discussions and proposed projects. The lectures cover diverse social and research issues including events at HMSC and global scales.

### **PAST GUEST SPEAKERS:**

Dr. James Carlton, Professor, Williams College, Director: Williams - Mystic Maritime Studies Program

Dr. Sally Hacker, Professor, Department of Zoology, Oregon State University, Corvallis

Dr. Rian Hooff, Oregon Department of Environmental Quality, Shipping and Transport of Aquatic Invasive Species Task Force

Dr. Chris Langdon, Professor, Coastal Oregon Marine Experiment Station, Oregon State University

Dr. Sylvia Yamada, Assistant Professor, Department of Zoology, Oregon State University, Corvallis, Oregon

*(Marine tsunami debris from Japan)*



### **COURSE Topics/Events (in approximate order):**

1- Preamble; 2- “Good”, “bad” and “neutral” modern invasions; 3- Prehistory, pre-natural history invasions; (28 June field trip along the Oregon Coast); 4 – Evolution’s back stories - Geology, climate, oceanography, Earth history; 5 - Mechanisms – Vectors, pathways, sources, destinations; 6 - Ecology – Definitions, Ideas and

Methods; 7 - Human dimensions – Costs/benefits; 8 - Control, mitigate, manage, adapt.

## **BI/FW 401 – Undergraduate Research Credit in Marine and Estuarine Research**

**2-4 Credits (T/TH – 8:00 AM- 1:00 PM, July 25 – September 7)**

Credit may be earned for conducting marine and estuarine research at HMSC under the supervision of a faculty member by enrolling in FW 401. *For more information, consult HMSC Academic Programs 541-867-0380 or [hmscacademic@oregonstate.edu](mailto:hmscacademic@oregonstate.edu).*

<http://hmsc.oregonstate.edu/summer>