

EOS 431/531 and PHYS 441: Physical Oceanography

Instructor: Johannes Gemmrich

Gemmrich@uvic.ca

Phone 250-472-5573, Bob Wright Building A441

Available for discussion after the lectures, or by appointment

Course information (UVic NetLink Id required), please check regularly :

<http://web.uvic.ca/~gemmrich/EOS431/>

Grading:

Assignments (~5): 50%

Term project: 40%

Reading/class discussion: 10%

Late hand in (without previous approval): -10% / day

Text book: *Introduction to Geophysical Fluid Dynamics*, 2nd edition,
by B. Cushman-Roisin & J.-M. Beckers, Academic Press
available at: UVic book store (hard copy, used or new)
UVic library (electronic book)

Material on the course web page

Course outline:

- 1) Introduction to Physical Oceanography
- 2) Tracers in the ocean
- 3) Unstratified fluid
 - Equation of motion
 - Geostrophy, Ekman layer
- 4) Waves
- 5) Basin-scale dynamics
- 6) Stratified fluid
- 7) Buoyancy forcing
 - Estuarine circulation
 - Thermohaline circulation
- 8) Class presentations