

## COASTAL ECOSYSTEMS

**Credits: 5,0 ECTS**

### Brief description of contents:

- Circulation patterns and mixing regimes in semi-enclosed bodies of water, bays and estuaries
- Geomorphological evolution of coastal systems
- Spatio-temporal variations of physical-chemical properties in coastal systems
- Estuaries. Chemical reactivity, mixing models and residence times. Salinity gradients
- Types of coastal ecosystem
- Rocky substrate ecosystems
- Sandy bottom ecosystems
- Soft bottom ecosystems
- Estuary ecology
- Structure and dynamics of seagrass meadows
- Marshes as earth-water interface areas
- Global threats to coastal ecosystems
- Estimate of transport processes in semi-enclosed bodies of water (practical classes)
- Oxygen and nutrient balance in coastal systems (practical classes)
- Field trips to hard and soft bottom ecosystems. Production methods (practical classes)

### Evaluation system:

SYSTEM	WEIGHT
Written or oral exams	30 – 60
Written projects and reports	15 – 30
Presentation of exercises, topics and projects	15 – 30
Attendance and participation in theory and practical classes, seminars and field trips	0 – 10