

EX 2715

1. **Physical Oceanography**
 2. **Geospatial Oceanography**
 3. **Current Courses**
 4. **Additional**

Physical Oceanography	Geospatial Oceanography	Current Courses	Additional
<p>Effective number of degrees of freedom</p> <p>1. Physical Oceanography</p> <p>2. Geospatial Oceanography</p> <p>3. Current Courses</p> <p>4. Additional</p>	<p>Effective number of degrees of freedom</p> <p>1. Physical Oceanography</p> <p>2. Geospatial Oceanography</p> <p>3. Current Courses</p> <p>4. Additional</p>	<p>Effective number of degrees of freedom</p> <p>1. Physical Oceanography</p> <p>2. Geospatial Oceanography</p> <p>3. Current Courses</p> <p>4. Additional</p>	<p>Effective number of degrees of freedom</p> <p>1. Physical Oceanography</p> <p>2. Geospatial Oceanography</p> <p>3. Current Courses</p> <p>4. Additional</p>

Part II. Description of Curricular Change

1. NEW RECORD

I. Catalog Description

GEOS 370 Oceanography

3c-3l-4cr

Prerequisite: Grade of C or better in GEOS 201 and GEOS 202

An introduction to physical, chemical, geological, and biological nature of the ocean:

Includes a field trip to the coast to study limestone deposits. Includes field trip(s) which may

4. Abyssal provinces
5. Lithogenous sediments
6. Biogenic sediments

Exam 1 (1 academic hour)

1. Properties of seawater
2. Density driven currents – thermohaline currents
3. Wind driven surface circulation
4. El Nino connections

Exam 2 (1 academic hour)

Part C (12 academic hours): Marine Ecosystems

1. Primary productivity
2. Chemosynthesis
3. Marine food chain
4. Marine policy

Final exam during final exam period.

VII. Required textbooks, supplemental books and readings

Thurman, H., and Burton, E. *Introductory Oceanography*. Upper Saddle River, New Jersey: Prentice Hall Publishing, 2005.

VIII. Special resource requirements

There are no special resource requirements for this course.

IX. Bibliography

In addition to the required textbook and supplemental readings from current literature, the following will be used to develop the course curriculum:

Bekker, A., et al. (2004) Dating the rise of atmospheric oxygen, *Nature*, 427, p.177-120.

Broecker, W. S., (1997) Thermohaline circulation, the Achilles heel of our climate system: Will man-made CO₂ upset the current balance? *Science*, 278, p. 1582-1588

Geosciences. The change in course number is proposed to be consistent with the Geoscience Department's new course numbering system.

4. OLD SYLLABUS OF RECORD

There is no available syllabus of record for this course. We propose that the syllabus shown

below be considered as the syllabus of record for this course.

No other departments or programs are affected by these revisions