



## **MODULE HANDBOOK**

### **Hydrography Surveying**

Dr. Supriatna, M.T.

Undergraduate Study Program for Geography  
Faculty of Mathematics and Natural Sciences  
Universitas Indonesia

---

---

## Hydrography Surveying

Module designation	Hydrography Surveying
Semester(s) in which the module is taught	Fifth (5th) Semester
Person responsible for the module	Dr. Supriatna, M.T.
Lecturer	<ol style="list-style-type: none"> <li>1. Dr. Supriatna, M.T.</li> <li>2. Tjong Giok Pin, S.Si, M.Si.</li> <li>3. Kuswantoro, S.Si, M.Si.</li> </ol>
Language	Bahasa Indonesia
Relation to curriculum	Elective
Teaching methods	Student-centered Learning and combination with Cooperative Learning
Workload (incl. contact hours, self-study hours)	<ol style="list-style-type: none"> <li>1. Lectures: 100 minutes per week per semester</li> <li>2. Assignment: 120 minutes per week per semester</li> <li>3. Independent study: 120 minutes per week per semester</li> <li>4. Minutes x weeks x semester: <math>340 \times 14 \times 1 = 4760</math> minutes per semester</li> <li>5. Midterm Examination: 100 minutes per semester</li> <li>6. Final Examination: 100 minutes per semester</li> <li>7. Total workload per semester: 4950 minutes / 82 hours 40 minutes</li> </ol>
Credit points	2 (Two)
Required and recommended pre-requisites for joining the module	<ol style="list-style-type: none"> <li>1. Hydrogeography</li> </ol>
Module objectives/intended learning outcomes	Able to provide in assessing and reviewing measurements and descriptions of the physical features of the ocean, sea, coast, lakes and rivers, as well as predicting changes from time to time, with the main purpose of safety navigation and supporting all other marine activities
Content	<ol style="list-style-type: none"> <li>1. Introduction to hydrographic surveys</li> <li>2. Datum survey and map coordinates concept</li> <li>3. Datum vertical and overcape sea water concept</li> <li>4. Positioning systems and navigation concept</li> <li>5. Sonar Side Scan Survey Concept</li> <li>6. Data preparation for hydrographic surveys</li> <li>7. Hydrographic Survey Project Management Concept</li> </ol>
Examination forms	-
Study and examination requirements	<ol style="list-style-type: none"> <li>1. Group and Presentation Score (40%)</li> <li>2. Individual Score (30%)</li> <li>3. Mid Examination (15%)</li> <li>4. Final Examination (15%)</li> <li>5.</li> </ol>

Reading list	<p>Yudho, Pranoto (2020). Survey Hidrografi (Untuk Surveyor dan Praktisi Kelautan). Jogjakarta: KBM Indonesia. Penerbitbukumurah.com.</p> <p>Poerbandono &amp; Djuarsah (2005). Survey Hidrografi. Bandung: PT. Refika Aditama.</p> <p>Pushidrosal (2019). Standar Kualifikasi Kompetensi Hidrografi dan Oseanografi dalam mendukung Survei Hidro-Oseanografi). Jakarta: Pusat Hidrografi dan Oseanografi TNI AL.</p> <p>BSN. (2016). Survei hidrografi menggunakan singlebeam echosounder. Jakarta: Badan Standarisasi Nasional.</p> <p>Fahrurrazi, D. (2011). Sistem Acuan Geodetik: dari Bigbang sampai kerangka acuan terrestrial. Yogyakarta: Gadjah Mada University Press</p>
--------------	---