



DEPARTMENT OF GEOMATICS ENGINEERING
UNDERGRADUATE PROGRAM IN GEOMATICS ENGINEERING
COURSE SYLLABUS

COURSE	Name	Boundary Mapping
	Code	RM184957
	Credits	3 (three)
	Semester	Elective Course

COURSE DESCRIPTION

In this course, students will be introduced to the concept and understanding of boundaries, which contains historical perspectives in determining boundaries. Inland boundaries for land based on legal basis and historical arguments or agreements. Management of regional boundaries covers boundaries between regencies, provinces, and countries based on existing regulations. For maritime boundaries, including legal basis and historical arguments, treaties / agreements, and management of maritime boundaries. Maritime boundaries and settlement include maritime boundary disputes, boundary dispute resolution and alternatives other than delimitation: Joint Development Zones and other collaborative mechanisms. The Application of Geomatics in the Determination and Confirmation of Territories as well as the challenges ahead for Indonesia.

EXPECTED LEARNING OUTCOME

D	Able to perform spatial data acquisition using modern measurement methods, geospatial data processing, using industry standard software, and making standard designs and analyzes in the fields of geodesy, surveying, hydrography, remote sensing, photogrammetry, and cadastral.
G	Able to plan, perform and evaluate the process of surveying and mapping activities using the latest technology in the fields of geodesy, surveying, hydrographic, remote sensing, photogrammetry, and cadastral.
H	Able to work in inter-disciplinary and inter-cultural teams so they can compete at national and international levels.
I	Able to be responsible to the community and adhere to professional ethics in solving technical problems in the fields of geodesy, surveying, hydrographic, remote sensing, photogrammetry, geographic information systems, and cadastral.

COURSE LEARNING OUTCOME

1	Understanding and explaining the legal aspects involved in determining and affirming territorial boundaries.
2	Able to apply Geomatics technology in determining and affirming boundaries
3	Being able to express their ideas orally and in writing
4	Being able to think critically about the use of geodetic technology for some boundary problems based on their understanding of the applicable rules or regulations

COURSE MATERIALS

1	The concept and understanding of boundaries and regions
2	Determination of Land Boundary,
3	Affirmation of Land Boundary
4	Boundary Determination at Sea
5	Maritime Border Disputes and Settlement
6	Regional Sea Management Boundaries
7	The Application of Geomatics in Determination and Affirmation of Territorial Boundaries, and Challenges going forward for Indonesia.

PREREQUISITE

Advanced Terrestrial Mapping

REFERENCES

A.	Main References
1	Abidin, 2001, "Beberapa Pemikiran Tentang Penetapan dan Penegasan Batas di Laut", Geo-Informatika, Vol. 8 No. 2-3, November 2001.
2	Amhar, Patmasari, dan Kencana, 2001, "Aspek-aspek Pemetaan Batas Wilayah Sebuah Tinjauan Komprehensif", Geo-Informatika, Vol. 8 No. 1, Agustus 2001.
3	Churchill, R. and Lowe, A. (1999). The Law of the Sea, Manchester University Press

- 4 International Hydrographic Organization (2006). A Manual on Technical Aspects of the United Convention on the Law of the Sea, Special Publication No 51, 4th edition, Monaco
- 5 Undang-Undang RI Nomor 23 Tahun 2014 Tentang Pemerintah Daerah

B. Additional References

- 1 Evans, Malcolm D. (1988). Relevant Circumstances and Maritime Delimitation, Clarendon Press - Oxford
- 2 Sutisna, S., 2004, Pandang Wilayah Perbatasan Indonesia
- 3 Permendagri No. 1/2006 tentang Pedoman Penegasan Batas Daerah