

Modul designation	Respiratory System
Semester in which the module is taught	5th Semester of Academic/Bachelor Stage
Person responsible for the module	<ol style="list-style-type: none"> 1. Ike Rahmawaty Alie, dr., M.Kes. 2. Widhy Yudistira Nalapraya, dr., SpP. 3. Dr. Lisa Adhia Garina, dr., Sp.A., M.Si.Med. 4. Umar Islami, dr., M.Kes. AIFO-K 5. Mirasari Putri, dr., Ph.D.
Language	Bilingual (Indonesia & English)
Relation to curriculum	Compulsory
Teaching methods	<ul style="list-style-type: none"> - Lecture - Tutorial - Laboratory activity
Workload	<p>Total workload : 7 weeks</p> <p>Contact hours : Lecture 2 hours/week</p> <p style="padding-left: 40px;">Tutorial 3 hours/meeting (3 meeting/week)</p> <p style="padding-left: 40px;">Laboratory activity 3 hours/meeting</p>
Credit points	10 ECTS (7 SKS)
Required & recommended prerequisites for joining the module	Learning course at 1 st -4 th semester
Module Objective	<p>At the end of course, students will be able to:</p> <ol style="list-style-type: none"> 1. Explain the formation of the upper and lower respiratory tract (C2) 2. Relating the formation of the upper and lower airways to cases of embryological abnormalities (C3) 3. Explain the macrostructural description of the organs in the upper respiratory tract (C2) 4. Explain the macrostructural description of the organs in the lower respiratory tract (C2) 5. Explain the macrostructural description of the thorax wall (C2) 6. Relate organ macrostructure to clinical case (C4) 7. Explain the microstructural appearance of the upper respiratory tract (C-2)

	<ol style="list-style-type: none"> 8. Explain the microstructural features of the lower respiratory tract (C-2) 9. Correlate airway microstructure to clinical case (C4) 10. Explain the function of the respiratory system and organs (C2) 11. Explain the physiology of the upper respiratory tract (C2) 12. Explain the physiology of the lower respiratory tract (C2) 13. Analyze case-related physiological abnormalities (C4) 14. (Explain the biochemical aspects of acid-base balance in the respiratory system (C2) 15. Analyze the biochemical aspects of acid- base balance in the respiratory system related to clinical case (C4) 16. Explain the normal flora microorganisms in the respiratory tract and the associated microbiological pathogens in clinical case (C2) 17. Linking pathogenic microbiological microorganisms related to the body's defence mechanism (C4) 18. Explain the definition, etiology, and classification of respiratory disorders (C2) 19. Analyze clinical manifestations based on the pathogenesis and pathophysiology, diagnosis, and differential diagnosis of respiratory tract disorders in accordance with the rules of clinical medicine (C4) 20. Analyze the selection of examinations to support respiratory disorders according to the problem with the principles of clinical medicine (C4) 21. Explain the management of each disease (C2) 22. Explain the principles of pharmacological therapy and the pharmacological properties of drugs for each disease (C2) 23. Analyze the principles of pharmacological therapy and pharmacological properties of drugs in each disease (C4) 24. Analyze the principles of case-related non-pharmacological therapy (C4) 25. Analyze the prognosis, complications, and prevention of respiratory system disorders ethically and professionally in communicating in accordance with the principles of bioethics and humanities (C4) (A4)
Content	Gastrointestinal System module discusses basic science, including embryology, anatomy, histology, physiology, biochemistry, anatomical pathology, clinical pathology, and pharmacology of the

	gastrointestinal and hepatobiliary tract. In addition, we will discuss several disorders of the gastrointestinal system that are most frequently encountered and that general practitioners must know about.
Examination forms	Multidisciplinary Examination (MDE), SOOCA, Lab exam
Study and examination requirements	System Pass Criteria : Minimum MDE, SOOCA and Lab exam score 55.5 (C)
Reading list	<ol style="list-style-type: none"> 1. Guyton & Hall. Text book Medical Physiology eleventh edition. Elsevier. 2. Walter F Boron, Emile L Boulpaep. Medical Physiology third edition. Elsevier. 3. Lauralee Sherwood. Human Physiology From Cells to Systems Sixth Edition. Thomson Brooks/Cole. 4. Eric P Widmaier, Hershel Raff, Kevin T Strang. Vander's Human Physiology The Mechanisms of Body Function. Mc Graw Hill. 5. Constanzo L. Physiology sixth edition. Elsevier 6. Jeremy PT Ward. At A Glance Respiratory System second edition. 7. Vanputte, et al, Seeley's Anatomy & Physiology, 11 th 8. Moore Anatomy 9. Netter : Musculoskeletal System vol. 6 Biology & Systemic Disease 10. Junqueira, Basic Histology Text dan Atlas 12 th. New York: McGraw-Hill Companies. 11. Wallen K. Lippincott Illustrated Review : Pharmacology. Wolters Kluwer. sixth edition. 12. Schwartz SI. Principles of Surgery. Eleven Edition..Mc Graw Hill Inc. New York, 13. ATLS edisi ke-9 14. Harley-Prescott: Laboratory Exercises in Microbiology, Fifth Edition, the McGraw-Hill Companies, 15. Sherris Medical Microbiology, An Introduction To Infectious Diseases 4th Edition, Kenneth J. Ryan, Md, C. George Ray, Md, Editors, Mcgraw-Hill Medical Publishing Division 16. Bailey and Scott's Diagnostic Microbiology, twelfth edition, Betty A. Forbes, Daniel F. Sahm, Alice S. Weissfeld, Elsevier, 2007 17. Medical Microbiology, Eight edition, Patrick R. Murray, Ken S. Rosenthal, Michael A. Pfaller, Editors, Elsevier 18. Buku Ilmu Kedokteran Fisik dan Rehabilitasi, Perdosri 19. Braddom's Physical Medicine and Rehabilitation, 5th Ed 20. Harrison's Internal Medicine 21. Pulmonologi UI, jilid I dan II 22. Fishman Pulmonary Disease and Disorders. Michael grippi dkk. 23. The Respiratory. Andrew Davies and Carl Moores. Elsevier.

24. Nelson textbook of Pediatric edisi 21
25. GINA
26. Buku Ajar Respirologi Anak IDAI
27. Buku Pedoman Nasional Asma Anak (PNAA)
28. Kendig Pediatric Pulmology
29. NHLBI/WHO Workshop Report.2006.Global Initiative for Chronic Obstructive Lung Disease.Publ.Number 2701.
30. NHLBI/WHO Workshop. GOLD, Pocket Guide to COPD Diagnosis,Management,and Prevention, a Guide for Physicians and Nurses.
31. Gerber ME, Dunham ME, Holinger LD. Stridor Aspiration and Cough. In: Byron JB,eds. Head and Neck Surgery Otolaryngology, 3rd ed. Philadelphia: Lippincott Williams & Wilkins.
32. Postma GN, Amin MR, Kofman JA. Laryngitis. In: Byron JB,eds. Head and Neck Surgery Otolaryngology, 3rd ed. Philadelphia: Lippincott Williams & Wilkins.
33. Peak W, Eiji Y. The Larynx. In: Lee KJ. Essential Otolaryngology,Head & Neck Surgery, 8th ed. Mc Graww Hill.
34. Bordow A Richard; Moser M Kenneth. Manual of Clinical Problems in Pulmonary Medicine. 4th ed.Little Brown Comp.USA.
35. De Gowin's. Diagnostic Examination,8th Ed.McGraw-Hill,USA.
36. Physical Medicine and Rehabilitation Jackson Tanc; j. Kisner C, Colby LA, Management of Pulmonary Condition. In : Carolyn Kisner, Therapeutic Exercise Foundation and Technique
37. Dorland's Illustrated Medical Dictionary. 30th Ed. Int.Edition
38. Dudek RW. Embryology. 5 th Edition. Philadelphia: Lippincot William and Wilkins.
39. Moore KL and Persaud TVN. The Developing Human: Clinically Oriented Embryology. 8 th Edition. Philadelphia: Elsevier Saunders
40. Sadler TW. Langman's Medical Embryology. 12 th Edition. Philadelphia: Lippincot William and Wilkins