


|  | <p style="text-align: center;">Universitas Negeri Surabaya Faculty of Medicine Study Program</p> | | | | | <p>Document Code</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| SEMESTER LEARNING PLAN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Courses | CODE | Course Family | Credit Weight | | | SEMESTER | Compilation Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Digestion | 1120100013 | | T=5 | P=1 | ECTS=9.54 | 4 | July 18, 2024 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AUTHORIZATION | SP Developer | | Course Cluster Coordinator | | | Study Program Coordinator | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Dr. dr. Endang Sri Wahjuni, M.Kes. | | | | | dr. Hanifiya Samha Wardhani, M.Kes. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Learning model | Project Based Learning | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Program Learning Outcomes (PLO) | PLO study program that is charged to the course | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PLO-9 | IV.1 Have basic skills in applying patient safety principles and principles of efforts to improve the quality of health services for individuals, families, communities and society. (CPL-11) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PLO-15 | II.1 Have basic knowledge in applying patient safety principles and principles of efforts to improve the quality of health services for individuals, families, communities and society. (CPL-3) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Program Objectives (PO) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PO - 1 | Knowledge | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PO - 2 | Attitude | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PO - 3 | Skills (Clinical Skills) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PLO-PO Matrix | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1" style="width: 100%; text-align: center;"> <tr> <td>P.O</td> <td>PLO-9</td> <td>PLO-15</td> </tr> <tr> <td>PO-1</td> <td></td> <td></td> </tr> <tr> <td>PO-2</td> <td></td> <td></td> </tr> <tr> <td>PO-3</td> <td></td> <td></td> </tr> </table> | | | | | | P.O | PLO-9 | PLO-15 | PO-1 | | | PO-2 | | | PO-3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P.O | PLO-9 | PLO-15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO-3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO Matrix at the end of each learning stage (Sub-PO) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1" style="width: 100%; text-align: center;"> <tr> <th rowspan="2">P.O</th> <th colspan="16">Week</th></tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr> <td>PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>PO-2</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>PO-3</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> | | | | | | P.O | Week | | | | | | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | PO-1 | | | | | | | | | | | | | | | | | PO-2 | | | | | | | | | | | | | | | | | PO-3 | | | | | | | | | | | | | | | | |
| P.O | Week | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PO-3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Short Course Description | This course studies knowledge in digestive medicine including the basic principles of digestion at the molecular, cellular, tissue, organ, individual, family and community levels in connection with the field of sports, as well as the management of digestive health problems in a promotive, preventive, curative and rehabilitative manner. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| References | Main : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1. Behrman RE, Kliegman RM, Nelson Essential of Pediatrics, 4 th ed., W.B. Saunders Company, Philadelphia, 2000 Braunwald, Fauci et al. Disease of the Liver and Biliary System.10th ed. Blackwell Science. United Kingdom. 2008. Fawcett DW, Jensch RP: Bloom & Fawcett's Concise Histology, 2nded, London, Arnold, 2002, Ganiswara SG, dkk, Farmakologi dan Terapi, edisi 4, Jakarta: Gaya Baru Press, 1995 Ganong, WF: Review of Medical Physiology, EGC, Jakarta, 1999 Goodman Gilman's : The Pharmacological Basis of Theurapeutics Gray's Anatomy: Anatomical basic of Clinic. Guyton AC, Hall John E: A Textbook of Medical Physiology ,10th ed., EGC, Jakarta, 1997. Jawet's Microbiology Junquera LC, Carneiro J, Editors: Jason Malley, Harriet Lebowitz, Peter J. Boyle Basic Histology, 11th ed., The Mc Graw-Hill Companies, New York, 2005. Lawrence, fapadaki. Current Medical Diagnosis and Treatmen. The Mc Graw Hill Companie. USA. 2008. Robin, Pathology Basic of Diseases, 7thed, W.B. Saunders Company. Philadelphia, 2005. Sherlock S, Dooley. Disease Of The Liver and Biliary System. 10th ed. Blackwell Science. United Kingdom.2004. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Supporters: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supporting lecturer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Week- | Final abilities of each learning stage (Sub-PO) | Evaluation | | Help Learning, Learning methods, Student Assignments, [Estimated time] | | Learning materials [References] | Assessment Weight (%) |
|-------|--|------------|--|--|-------------------|---|-----------------------|
| | | Indicator | Criteria & Form | Offline (offline) | Online (online) | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | Explains digestive system diseases that often occur in the gastrointestinal area starting from etiology to prognosis | CP2 CP3 | Criteria: 1.MCQs 2.MCQs 3.Block Exam 4.Response 5.Tutorial Rubric Forms of Assessment : Participatory Activities, Practical Assessment, Tests | Lecture I Clinical physiology underlying gastrohepatopancreatic disease Lecture II Clinical biochemistry underlying gastrohepatopancreatic disease. Lecture III Clinical microbiology underlying the gastrohepa to pancreas Lecture IV. Dental and oral diseases Lecture V. Gastrointestinal Diseases al Microbiology Practicum topic identification of enteric germs, and sensitivity culture Tutorial Hepatobiliary Diseases 8x100' | | Material: Students are able to explain physiology affecting the condition of the digestive system, including receptors in the stomach. References: <hr/> Material: Students are able to explain the mechanisms of allergies, fullness, hunger, irritability, nausea, vomiting, constipation and obstipation. References: <hr/> Material: Students are able to explain enzymatic digestion in the digestive system which affects the condition of the digestive system including the role of MALT-GALT. References: <hr/> Material: Students are able to explain bacterial infections, bacterial toxins and their effect on the digestive system. References: <hr/> Material: Students are able to explain viruses and the protection of the plaquepayeri accessory gland. Reference: <hr/> Material: Students are able to explain digestive system diseases that often occur in the oral cavity. Reference: <hr/> Material: Students are able to explain digestive system diseases that often occur in the Gastrointestinal Library: <hr/> Material: Students explain the etiology of system diseases . Library: <hr/> Material: Students are able to show the etiology of germs and protozoa that cause gastrointestinal and heaptobilliary diseases. References: <hr/> Material: Students are able to assess the effectiveness of therapy through culture and sensitivity tests . Reference: <hr/> Material: Students are able to explain the location and position as well as the logic of the anatomical | 602020% |

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| | | | | | <p>histology of the emergence of disorders including the epidemiology of digestive system diseases, especially hepatobiliary.</p> <p>References:</p> <hr/> <p>Material: Students are able to explain the etiology, pathophysiological processes and examination of diseases of the digestive system, especially hepatobiliary</p> <p>literature:</p> <hr/> <p>Material: Students are able to explain complications of digestive system diseases, especially hepatobiliary</p> <p>literature:</p> <hr/> <p>Material: Students are able to explain the basic principles of management and therapy of diseases of the digestive system, especially hepatobiliary</p> <p>literature:</p> <hr/> | |
| 2 | Explains digestive system diseases that often occur in hepato and biliary tract, starting from etiology to prognosis | CP2 CP3 | <p>Criteria: Block Exam</p> <p>Form of Assessment : Test</p> | Lecture VI. Hepatobiliary Diseases Lecture VII. Gastritis 2x100' | <p>Material: Students explain the anatomy of pre-hepatal, hepatal and post-hepatal vascularization.</p> <p>References:</p> <hr/> <p>Material: Students explain the anatomy of vascularization and biochemistry of the biliary system, bile formation: direct-indirect bilirubin.</p> <p>References:</p> <hr/> <p>Material: Students can explain the virus that causes hepatitis starting from the structure of the virus, virulence mechanisms and toxins.</p> <p>References:</p> <hr/> <p>Material: Students can explain amoeba infection in the hepatobiliary system.</p> <p>References:</p> <hr/> <p>Material: Students can explain about fatty liver and billiard jaundice.</p> <p>References:</p> <hr/> | 602020% |
| 3 | Explains digestive system diseases that often occur in children, such as acute diarrhea and fluid therapy for acute diarrhea | CP2 CP3 | <p>Criteria: Block Exam</p> | Lecture VIII. Diarrhea and food intolerance Lecture IX Dehydration and fluid therapy in children 2x100' | <p>Material: Students explain diarrhea caused by protozoa, viruses and bacteria.</p> <p>References:</p> <hr/> <p>Material: Students explain lactose intolerance and malabsorption</p> <p>Reference:</p> <hr/> <p>Material: Students are able to explain hydration status in children and signs of dehydration.</p> <p>Reference:</p> <hr/> | 602020% |

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| 4 | Explain the laboratory examinations needed to diagnose digestive system diseases (microbiology, parasitology, etc.) | CP2 CP3 | Criteria: 1.Block exam 2.Respond Form of Assessment : Participatory Activities, Tests | Lecture | | Material: Students explain the interpretation of liver function tests. References: <hr/> Material: Students carry out stool tests, stain for icteric bacteria and interpret the results. References: | 602020% |
| 5 | Explains various pathological conditions and neoplasms in the gastrointestinal and hepatobiliary systems | CP2 CP3 | Criteria: Block Exam Form of Assessment : Test | Lecture XI Pathology of the Gastrointestinal System including examination of hepatobiliary function Lecture | | Material: Students are able to explain anomalies, infections, autoimmune disorders, allergies and neoplasms. References: <hr/> Material: Name and explain the pathomechanism and pathophysiology of various diseases of the organs of the Gastrohepatointestinal system. Reference: <hr/> Material: Students are able to explain the interpretation of supporting histopathological examinations: acute and chronic infections, neoplasms. References: | 602020% |
| 6 | Explain radiological examinations that support the diagnosis of digestive system diseases | | Criteria: Block Exam Form of Assessment : Test | Lecture XIII Radiological examination of Gastrointestinal, hepato, and biliary neoplasms 1 | | Material: Students explain the interpretation of radiological examinations for diseases of the digestive system. Reference: | 602020% |
| 7 | Explain the pharmacological management of digestive system diseases | CP2 CP3 | Criteria: Block Exam Form of Assessment : Test | Lecture XIII Gastrointestinal Pharmacology Therapy, hepatobiliary 1x100' | | Material: Students explain therapy for dyspepsia, allergies, gastritis and ulcers. Reference: <hr/> Material: Students explain therapy for gastroenteritis. Reference: | 602020% |
| 8 | Explain the average emergency disease in the gastrointestinal and hepatobiliary systems | CP2 CP3 | Criteria: Tutorial Rubric Form of Assessment : Participatory Activities | Tutorial II. Bloody Diarrhea Topic: Reversible pulpitis, Anorectal Disorder, hematemesis, melena, fissura and perianal abscess 2x100' | | Material: Students can explain the occurrence of gastrointestinal bleeding Reference: <hr/> Material: Students explain emergencies in the oral cavity. Reference: <hr/> Material: Students can explain Anorectal Disorders and pulminant hepatitis References: <hr/> Material: Explaining the emergency of Hematemesis melena Reference: | 602020% |

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| 9 | Describe diseases of the gastrointestinal and hepatobiliary systems that require surgery. | CP2 CP3 | Criteria: Block Exam Form of Assessment : Test | Lecture XIV. Operative measures in gastrointestinal and hepatobiliary cases Tutorial III. Abdominal Pain Topic: Acute abdominal pain and abdominal emergencies 3x100' | | Material: Students are able to explain diseases of the gastrointestinal, hepatobiliary and pancreatic systems that require invasive treatment. Reference: Material: Students are able to explain acute abdominal disease Reference: Material: Students are able to explain patient safety in the treatment of acute abdomen. Reference: | 602020% |
| 10 | | | | | | | 0% |
| 11 | | | | | | | 0% |
| 12 | | | | | | | 0% |
| 13 | | | | | | | 0% |
| 14 | | | | | | | 0% |
| 15 | | | | | | | 0% |
| 16 | | | | | | | 0% |

Evaluation Percentage Recap: Project Based Learning

| No | Evaluation | Percentage |
|----|--------------------------|-------------|
| 1. | Participatory Activities | 1103703.33% |
| 2. | Practical Assessment | 200673.33% |
| 3. | Test | 3511783.33% |
| | | 100% |

Notes

- Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
- The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
- Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
- Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
- Indicators for assessing** ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
- Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
- Forms of assessment:** test and non-test.
- Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
- Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
- TM=Face to face, PT=Structured assignments, BM=Independent study.