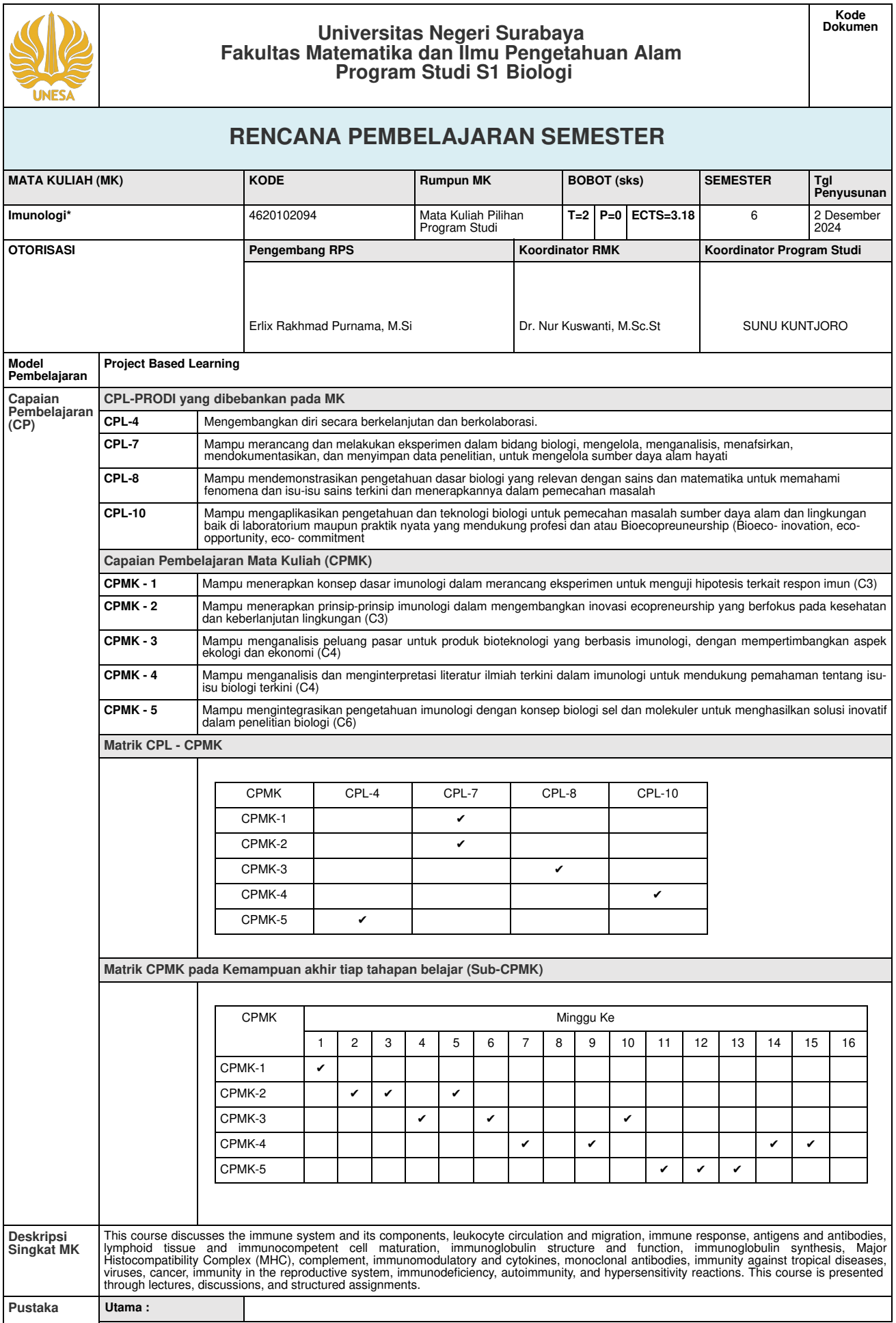




1. Abbas, A.K., Lichtman, A.H., and Pillai, S. 2023. BASIC IMMUNOLOGY: Functions and Disorders of the Immune System, 7 th Edition. Missouri: Elsevier 2. Abbas, A.K., Lichtman, A.H., and Pillai, S. 2018. CELLULAR AND MOLECULAR IMMUNOLOGY, 9th Edition. Philadelphia: Elsevier 3. Delves, P.J., Martin, S.J., Burton, D.R., and Roitt, I.M. 2017. ROITT'S ESSENTIAL IMMUNOLOGY, 13th Edition. London: Wiley Blackwell							
Pendukung :							
1. Purnama, E.R. 2021. Modul 1: Imunologi. CV AUSY MEDIA							
Dosen Pengampu		Dr. Nur Kuswanti, M.Sc.St. Nur Qomariyah, S.Pd., M.Sc. Erlin Rakhmad Purnama, S.Si., M.Si.					
Mg Ke-	Kemampuan akhir tiap tahapan belajar (Sub-CPMK)	Penilaian		Bantuan Pembelajaran, Metode Pembelajaran, Penugasan Mahasiswa, [Estimasi Waktu]		Materi Pembelajaran [Pustaka]	Bobot Penilaian (%)
		Indikator	Kriteria & Bentuk	Luring (offline)	Daring (online)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Identifying The Basic Concepts of Immune System	1.Explaining the history of immunology 2.Identifying the position of immunology in other sciences 3.Explaining the concept of body's defense system 4.Connecting recent research about immunological concepts	Kriteria: 1.Assignment 30% 2.Mid-Exam 20% 3.Attendance and Participation 20% Bentuk Penilaian : Aktifitas Partisipasif	Oration method in classroom 2 X 50 menit	Oration method by paltform Google Classroom 2 x 50 menit	Materi: Identifying The Basic Concepts of Immune System Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2023. BASIC IMMUNOLOGY: Functions and Disorders of the Immune System, 7 th Edition. Missouri: Elsevier	2%
2	Describing Immune Response	1.Explaining the humoral immune system and the components 2.Explaining the cellular immune system and the components 3.Explaining initiation of immune response 4.Explaining innate and adaptive immune responses	Kriteria: 1.Assignment 30% 2.Mid-Exam 20% 3.Attendance and Participation 20% Bentuk Penilaian : Aktifitas Partisipasif	Discussion and Assignment in Classroom 2 X 50 menit	Discussion and Assignment via Google Classroom 2 x 50 menit	Materi: Describing Immune Response Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2018. CELLULAR AND MOLECULAR IMMUNOLOGY, 9th Edition. Philadelphia: Elsevier	0%
3	Explaining Lymphoid Tissue and Maturation of Immunocompetent Cells	1.Identifying types of lymphoid tissue and immunocompetent cells 2.Explaining Maturation of immunocompetent cells	Kriteria: 1.Assignment 30% 2.Mid-Exam 20% 3.Attendance and Participation 20% Bentuk Penilaian : Aktifitas Partisipasif	Oration and discussion in Classroom 2 X 50 menit	Oration and discussion via Google Classroom or Meet 2 x 50 menit	Materi: Explaining Lymphoid Tissue and Maturation of Immunocompetent Cells Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2018. CELLULAR AND MOLECULAR IMMUNOLOGY, 9th Edition. Philadelphia: Elsevier	0%
4	Comparing structure, Function and Synthesis of Immunoglobulins	1.Identifying structure of the various classes of immunoglobulins 2.Identifying structure of the various function of immunoglobulins 3.Explaining immunoglobulins synthesis	Kriteria: 1.Assignment 30% 2.Mid-Exam 20% 3.Attendance and Participation 20% Bentuk Penilaian : Aktifitas Partisipasif	Oration in Classroom 2 X 50 menit	Oration via Google Meet or discussion via Google Classroom 2 x 50 menit	Materi: Comparing structure, Function and Synthesis of Immunoglobulins Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2018. CELLULAR AND MOLECULAR IMMUNOLOGY, 9th Edition. Philadelphia: Elsevier	0%

5	Describing Antigens and Antibodies Reaction Process	1. Identifying meanings of antigens and antibodies 2. Describing general structure of antibodies 3. Explaining the bond between antibodies and antigens.	Kriteria: 1. Assignment 30% 2. Mid-Exam 20% 3. Attendance and Participation 20% Bentuk Penilaian : Aktifitas Partisipasif, Tes	Oration and Assignment: some cases about Antigens and Antibodies reactions 2 X 50 menit	Discussion and Assignment in case "Research results in monoclonal antibodies from hybridoma cells that bind to specific antigens" 2 x 50 menit	Materi: Antigens and Antibodies Reaction Process Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2023. <i>BASIC IMMUNOLOGY: Functions and Disorders of the Immune System, 7th Edition.</i> Missouri: Elsevier	38%
6	Describing Mechanism Circulation and Migration of Leukocytes	1. Describing interaction of leukocytes and endothelial tissue 2. Identifying the way of migration of neutrophils and monocytes to the infected site 3. Explaining the migration and recirculation pattern of T lymphocytes	Kriteria: 1. Assignment 30% 2. Mid-Exam 20% 3. Attendance and Participation 20% Bentuk Penilaian : Aktifitas Partisipasif	Oration and discussion on case studies of immunotherapy strategies based on Leucocytes activity in the Classroom 2 X 50 menit	Online discussion on case studies of immunotherapy strategies based on Leucocytes activity 2 X 50 menit	Materi: Circulation and Migration of Leukocytes Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2018. <i>CELLULAR AND MOLECULAR IMMUNOLOGY, 9th Edition.</i> Philadelphia: Elsevier	0%
7	Comparing Structure and Function of The Various Classes of Major Histocompatibility Complex (MHC)	1. Describing meanings of MHC 2. Identifying all kinds of MHC 3. Explaining role of MHC about immune system concept	Kriteria: 1. Assignment 30% 2. Mid-Exam 20% Bentuk Penilaian : Aktifitas Partisipasif, Tes	Oration or discussion in the Classroom; Immunology Modul implementation 2 X 50 menit	Immunology Modul implementation 2 X 50 menit	Materi: Structure and Function of The Various Classes of Major Histocompatibility Complex (MHC) Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2023. <i>BASIC IMMUNOLOGY: Functions and Disorders of the Immune System, 7th Edition.</i> Missouri: Elsevier Materi: Major Histocompatibility Complex (MHC) Pustaka: Purnama, E.R. 2021. <i>Modul 1: Immunologi.</i> CV AUSY MEDIA	0%
8	Middel Exam	Meeting 1-7	Kriteria: Based on each indicator Bentuk Penilaian : Tes	- 2 X 50			0%
9	Explaining The Meaning and Role of Cytokines and Immune System Complement	1. Explaining definition of cytokines and complement 2. Mentioning the biological function of cytokines and complement	Kriteria: 1. Assignment 30% 2. Final Exam 30% 3. Attendance and Participation 20% Bentuk Penilaian : Aktifitas Partisipasif	Oration or discussion in Classroom 2 X 50 menit	Discussion about the cytokines experiment as case study 2 x 50 menit	Materi: Role of Cytokines and Immune System Complement Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2023. <i>BASIC IMMUNOLOGY: Functions and Disorders of the Immune System, 7th Edition.</i> Missouri: Elsevier	0%

10	Describing Monoclonal Antibody and Immunomodulatory	1.Describing definition of monoclonal antibody 2.Identifying process of making monoclonal antibody 3.Explaining the role of monoclonal antibody as diagnostic and therapeutic 4.Explaining definition of immunomodulator 5.Identifying the role of immunomodulatory substances in the body	Kriteria: 1.Assignment 30% 2.Final Exam 20% 3.Attendance and Participation 20% Bentuk Penilaian : Aktifitas Partisipasif	Oration and discussion in Classroom 2 X 50 menit	Discussion about Monoclonal Antibody as a Case Study 2 X 50 menit	Materi: Monoclonal Antibody Pustaka: Delves, P.J., Martin, S.J., Burton, D.R., and Roitt, I.M. 2017. <i>ROITT'S ESSENTIAL IMMUNOLOGY</i> , 13th Edition. London: Wiley Blackwell Materi: Immunomodulatory Pustaka: Purnama, E.R. 2021. Modul 1: <i>Imunologi</i> . CV AUSY MEDIA	20%
11	Analyzing Process of Immunity of Tropical Diseases	1.Explaining definition of tropical diseases 2.Comparing system immune function on the pathogens (bacteria, fungi, and parasites)	Kriteria: 1.Assignment 30% 2.Final Exam 30% 3.Attendance and Participation 20% Bentuk Penilaian : Aktifitas Partisipasif	Oration and discussion in Classroom 2 X 50 menit	Discussion in case: Immune Response in Dengue Hemorrhagic Fever and Antibody-Dependent Enhancement 2 X 50 menit	Materi: Immune Response in Dengue Hemorrhagic Fever Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2018. <i>CELLULAR AND MOLECULAR IMMUNOLOGY</i> , 9th Edition. Philadelphia: Elsevier Materi: Antibody-Dependent Enhancement Pustaka: Delves, P.J., Martin, S.J., Burton, D.R., and Roitt, I.M. 2017. <i>ROITT'S ESSENTIAL IMMUNOLOGY</i> , 13th Edition. London: Wiley Blackwell	0%
12	Describing Immunity of Viruses and Cancer	1.Explaining immune system role of viruses and cancer 2.Explaining immune response mechanism of viruses and cancer 3.Browsing various information on immune therapy of cancer	Kriteria: 1.Assignment 30% 2.Attendance and Participation 20% 3.Final Exam 30% Bentuk Penilaian : Aktifitas Partisipasif	Oration and discussion in Classroom 2 X 50 menit	Oration and discussion in Google Meet 2 X 50 menit	Materi: Immunity of Viruses and Cancer Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2023. <i>BASIC IMMUNOLOGY: Functions and Disorders of the Immune System</i> , 7th Edition. Missouri: Elsevier	0%
13	Describing Immunology of the Reproductive System	1.Explaining immunity on male and female system reproduction 2.Explaining immunity in fertilization and pregnancy	Kriteria: 1.Assignment 30% 2.Attendance and Participation 20% 3.Final Exam 30% Bentuk Penilaian : Aktifitas Partisipasif, Tes	Oration and discussion in Classroom 2 X 50 menit	Discussion about Immunology of the Reproductive System via Google Meet 2 x 50 menit	Materi: Immunology of the Reproductive System Pustaka: Abbas, A.K., Lichtman, A.H., and Pillai, S. 2023. <i>BASIC IMMUNOLOGY: Functions and Disorders of the Immune System</i> , 7th Edition. Missouri: Elsevier	20%

14	Explaining The Concept of Immunodeficiency and Autoimmune	1.Explaining primary and secondary immunodeficiency 2.Explaining HIV and AIDS 3.Explaining definition of autoimmune and types of autoimmune	Kriteria: 1.Assignment 30% 2.Attendance and Participation 20% 3.Final Exam 30% Bentuk Penilaian : Aktifitas Partisipatif	Oration and discussion in Classroom 2 X 50 menit	Discussion about Immunodeficiency and Autoimmune via Google Meet 2 x 50 menit	Materi: Immunodeficiency and Autoimmune Pustaka: <i>Delves, P.J., Martin, S.J., Burton, D.R., and Roitt, I.M. 2017. ROITT'S ESSENTIAL IMMUNOLOGY, 13th Edition. London: Wiley Blackwell</i>	0%
15	Explaining Concept Hypersensitivity Reaction	1.Explaining the causes of hypersensitivity 2.Explaining mechanism and classification of hypersensitivity reactions 3.Explaining the diseases caused by antibodies and T lymphocytes	Kriteria: 1.Assignment 30% 2.Attendance and Participation 20% 3.Final Exam 30% Bentuk Penilaian : Aktifitas Partisipatif, Tes	Oration and discussion in Classroom 2 X 50 menit	Discussion about Hypersensitivity Reaction 2 x 50 menit	Materi: Hypersensitivity Reaction Pustaka: <i>Abbas, A.K., Lichtman, A.H., and Pillai, S. 2018. CELLULAR AND MOLECULAR IMMUNOLOGY, 9th Edition. Philadelphia: Elsevier</i>	20%
16		Materi 9 - 15	Kriteria: Final Exam 30%			Materi: All Pustaka: <i>Abbas, A.K., Lichtman, A.H., and Pillai, S. 2023. BASIC IMMUNOLOGY: Functions and Disorders of the Immune System, 7th Edition. Missouri: Elsevier</i>	0%

Rekap Persentase Evaluasi : Project Based Learning

No	Evaluasi	Persentase
1.	Aktifitas Partisipatif	61%
2.	Tes	39%
		100%

Catatan

- Capaian Pembelajaran Lulusan Prodi (CPL - Prodi)** adalah kemampuan yang dimiliki oleh setiap lulusan prodi yang merupakan internalisasi dari sikap, penguasaan pengetahuan dan ketrampilan sesuai dengan jenjang prodinya yang diperoleh melalui proses pembelajaran.
- CPL yang dibebankan pada mata kuliah** adalah beberapa capaian pembelajaran lulusan program studi (CPL-Prodi) yang digunakan untuk pembentukan/pengembangan sebuah mata kuliah yang terdiri dari aspek sikap, ketrampilan umum, ketrampilan khusus dan pengetahuan.
- CP Mata kuliah (CPMK)** adalah kemampuan yang dijabarkan secara spesifik dari CPL yang dibebankan pada mata kuliah, dan bersifat spesifik terhadap bahan kajian atau materi pembelajaran mata kuliah tersebut.
- Sub-CPMK Mata kuliah (Sub-CPMK)** adalah kemampuan yang dijabarkan secara spesifik dari CPMK yang dapat diukur atau diamati dan merupakan kemampuan akhir yang direncanakan pada tiap tahap pembelajaran, dan bersifat spesifik terhadap materi pembelajaran mata kuliah tersebut.
- Indikator penilaian** kemampuan dalam proses maupun hasil belajar mahasiswa adalah pernyataan spesifik dan terukur yang mengidentifikasi kemampuan atau kinerja hasil belajar mahasiswa yang disertai bukti-bukti.
- Kreteria Penilaian** adalah patokan yang digunakan sebagai ukuran atau tolok ukur ketercapaian pembelajaran dalam penilaian berdasarkan indikator-indikator yang telah ditetapkan. Kreteria penilaian merupakan pedoman bagi penilai agar penilaian konsisten dan tidak bias. Kreteria dapat berupa kuantitatif ataupun kualitatif.
- Bentuk penilaian:** tes dan non-tes.
- Bentuk pembelajaran:** Kuliah, Responsi, Tutorial, Seminar atau yang setara, Praktikum, Praktik Studio, Praktik Bengkel, Praktik Lapangan, Penelitian, Pengabdian Kepada Masyarakat dan/atau bentuk pembelajaran lain yang setara.
- Metode Pembelajaran:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, dan metode lainnya yg setara.
- Materi Pembelajaran** adalah rincian atau uraian dari bahan kajian yg dapat disajikan dalam bentuk beberapa pokok dan sub-pokok bahasan.
- Bobot penilaian** adalah prosentasi penilaian terhadap setiap pencapaian sub-CPMK yang besarnya proposional dengan tingkat kesulitan pencapaian sub-CPMK tsb., dan totalnya 100%.
- TM=Tatap Muka, PT=Penugasan terstruktur, BM=Belajar mandiri.

