# RANCANGAN PEMBELAJARAN SEMESTER




2026

TAHAP PENGAYAAN
BIOLOGI MOLEKULER
DAN FARMAKOLOGI
KLINIK

## PROGRAM STUDI
## ILMU KESEHATAN ANAK

# RANCANGAN PEMBELAJARAN SEMESTER

# TAHAP PENGAYAAN

## BIOLOGI MOLEKULER DAN FARMAKOLOGI KLINIK

## TAHUN 2026

## LEMBAR PENGESAHAN

Rancangan Pembelajaran Semester Tahap Pengayaan Program Pendidikan Dokter Spesialis Ilmu Kesehatan Anak Fakultas Kedokteran Universitas Sebelas Maret disahkan pada tanggal 30 September 2026.

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| Disahkan oleh,<br>Dekan Fakultas Kedokteran UNS | Disetujui oleh,<br>KPS PPDS IKA FK UNS |
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# DAFTAR ISI


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| KBIKA4 : Biologi Molekuler dan Farmakologi Klinik | 4 |
| Rancangan Tugas | 18 |
| Lampiran | 32 |

| | RENCANA PEMBELAJARAN SEMESTER (RPS)<br>PROGRAM STUDI ILMU KESEHATAN ANAK<br>FAKULTAS KEDOKTERAN<br>UNIVERSITAS SEBELAS MARET | | | |
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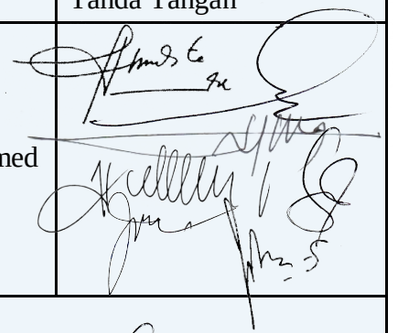
| Identitas Mata Kuliah | | Identitas dan Validasi | Nama | Tanda Tangan |
| Kode Mata Kuliah | : KBIKA4 | Dosen Pengembang RPS | : Prof. Dono Indarto,dr,M.Biotech.St,Ph.D, AIFM<br>dr. Pudjiastuti, Sp.A, Subsp. ETIA(K)<br>dr. Husnia Auliyatul Umma, Sp.A, M.Kes<br>dr. Andhika Trisna Putra, Sp. A, Subsp. Neo(K), M.Biomed<br>dr. Sandi Nugraha, Sp.A, Subsp.NPM(K), M.Biomed<br>dr. David Anggara Putra, Sp.A, MH<br>dr. Pitra Sekarhandini, Sp.A |  |
| Nama Mata Kuliah | : Biologi Molekuler dan Farmakologi Klinik | | | |
| Bobot Mata Kuliah (sks) | : 1 SKS | Koord. Kelompok Mata Kuliah | : dr. Sandi Nugraha, Sp.A, Subsp.NPM(K), M.Biomed |  |
| Semester | : 1 | Kepala Program Studi | : Dr. dr. Hari Wahyu N, Sp.A, Subsp.TKPS(K), M.Kes | |
| Bobot Mata Kuliah (SKS) | : - | | | |
| a. Bobot tatap muka | : | | | |
| b. Bobot Praktikum | : | | | |
| c. Bobot praktek lapangan | : | | | |
| d. Bobot Simulasi | : | | | |
| Mata Kuliah Prasyarat | : | | | |
| Tanggal dibuat | : 30 September 2026 | Perbaikan ke : 0 | | Tanggal Edit : 30 September 2026 |

| **Capaian Pembelajaran Lulusan (CPL) / Learning Outcome (LO) yang dibebankan pada Mata Kuliah** | |
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| **Kode CPL /LO** | **Unsur CPL /LO** |
| CP | 1. Keterampilan Klinis<br>2. Mempergunakan landasan ilmiah ilmu kedokteran dalam praktek<br>3. Diagnosis, pengelolaan, pencegahan dan keselamatan pasien<br>4. Belajar sepanjang hayat dan pengelolaan informasi<br>5. Pengembangan profesi, kepribadian dan medikolegal<br>6. Konteks sosial, kemasyarakatan dan manajemen pelayanan kesehatan |
| Capaian Pembelajaran Mata Kuliah (CPMK) | 1. Mahasiswa mampu memahami dasar-dasar biologi molekuler<br>2. Mahasiswa mampu memahami kasus-kasus anak dengan dasar biologi molekuler<br>3. Mahasiswa mampu memahami dasar-dasar farmakologi klinik<br>4. Mahasiswa mampu menerapkan ilmu farmakologi klinik pada kasus infeksi dan non-infeksi anak, neonatus dan kegawatan |
| Bahan Kajian Keilmuan (Subject Matters) | 1. Biologi molekuler<br>2. Farmakologi klinik |
| Deskripsi Mata Kuliah | Mahasiswa memahami dasar biologi molekuler dan farmakologi klinik pada setting di klinis baik kasus infeksi dan non infeksi anak, neonatus dan kegawatan. |
| Basis Penilaian | a. Aktvitas Partisipatif (Case Method) = 0% |
| | b. Hasil Proyek (Team Based Project) = 0% |
| | c. Tugas = 0% |
| | d. Quis = 0% |
| | e. UTS = 0% |
| | f. UAS = 0% |
| Daftar Referensi | **Buku ajar**:<br>1. Farmakologi dasar |

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| | 2. Biologi molekuler<br>**Jurnal** :<br>1. Syahmi Amar, Rustam Siregar, Husnia Auliyatul U, Ramsay Hunt Syndrome: A Case Report, Asia Pacific Journal of Paediatri Child Health, Volume 4, Apr - Jun 2021<br>2. Yanuar Ariefudin, Husnia Auliyatul Umma, Fadhilah Tia Nur, Harsono Salimo, Usia Gestasi Sebagai Prediktor Keberhasilan Terapi Antibiotik Empiris pada Infeksi Neonatorum di Rumah Sakit Umum Daerah Dr. Moewardi Surakarta, Sari Pediatri, Vol. 24, No. 3, Oktober 2022<br>3. Hendra Wardhana, Muhammad Riza, Husnia Auliyatul Umma, Differences Levels of Sodium, Potassium, Calcium, and Magnesium Before and After Cisplatin Administration in Child with Osteosarcoma, Journal of Maternal and Child Health (2022), 07(05): 609-617<br>4. Yulistya Hani, Evi Rokhayati, David Anggara Putra, Hubungan Pengetahuan Ibu tentang Diare dengan Kejadian Diare pada Balita di Wilayah Kecamatan Jebres Surakarta, Plexus Medical Journal, Vol 1 (6) 2022 : 219 – 223<br>5. Fista Utami, Dono Indarto and Shanti Listyawati, Enhancement of Flavonoid and Anthocyanin Levels of Herbal Beverage Containing Butterfly Pea Flower and Lemon Fruit to Improve Anti-oxidant Activity, ICSDH 2022 - The International Conference on Social Determinants of Health<br>6. Agus Sucianto, Pudjiastuti, Diah Lintang Kawuryan, The Role of Ferritin Serum Level as Predictor Sepsis Mortality on Children in Dr. Moewardi Hospital of Surakarta, Journal of Maternal and Child Health (2023), 08(02): 210-216<br>7. Belvathilda Jennidan Moedjiono, Evi Rokhayati, David Anggara Putra, Hubungan Aktivitas Fisik Dengan Konstipasi Pada Santri Pondok Pesantren di Kabupaten Sidoarjo, Plexus Medical Journal, Vol 2 (2) 2023: 70 – 76<br>8. Arie Falah, Septin Widiretnani, Husnia Auliyatul Umma, Pengaruh Toksisitas Hematologi Fase Konsolidasi Terhadap Kesintasan Pasien Leukemia Limfoblastik Akut di Rumah Sakit Umum Daerah Dr. Moewardi Surakarta, Sari Pediatri, Vol. 24, No. 5, Februari 2023 |

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| | 9. Asna Puja Maharani Yumi, Husnia Auliyatul Umma, Ismiranti Andarini, The Correlation between Antiretroviral Therapy Adherence and Quality of Life in Children with HIV/AIDS at Dr. Moewardi General Hospital Surakarta Indonesia, Asia Pacific Journal Paediatr Child Health, Volume 6, Jul - Sep 2023<br>10. Aqillah Azzah, Evi Rokhayati, Husnia Auliyatul Umma, Hubungan Pemberian ASI Eksklusif dan Susu Formula Terhadap pH Feses Bayi 0-6 Bulan, Plexus Medical Journal, Vol 2 (5) 2023: 197 – 205<br>11. Diaz Alifarizki Zuvarcan, David Anggara Putra, Sri Martuti, Correlation between Preeclampsia and Infant Low Birth Weightat Dr. Moewardi Hospital, Surakarta, Central Java, Indonesia, Journal of Maternal andChild Health (2023), 09(01): 28-37<br>12. Agus Sucianto, Pudjiastuti, Diah Lintang Kawuryan, The Role of Ferritin Serum Level as Predictor Sepsis Mortality on Children in Dr. Moewardi Hospital of Surakarta, Journal of Maternal and Child Health (2023), 08(02): 210-216<br>13. Dhoni Akbar Ghozali, Muchsin Doewes, Soetrisno Soetrisno, Dono Indarto, Muhana Fawwazy Ilyas, Dose-response effect of L-citrulline on skeletal muscle damage after acute eccentric exercise: an *in vivo* study in mice, Biochemistry, Biophysics And Molecular Biology, 2023<br>14. Aqillah Azzah, Evi Rokhayati, Husnia Auliyatul Umma, Hubungan Pemberian ASI Eksklusif dan Susu Formula Terhadap pH Feses Bayi 0-6 Bulan, Plexus Medical Journal, Vol 2 (5) 2023: 197 – 205<br>15. Inayati, Inayati; Arifin, Nuha H.; Febriansah, Rifky; Indarto, Dono; Suryawati, Betty; Hartono, Hartono, Trans-Cinnamaldehyde Inhibitory Activity Against mrkA, treC, and luxS Genes in Biofilm-forming Klebsiella pneumoniae: An In Silico Study, Tropical Journal of Natural Product Research, 2023, v. 7, n. 10, p. 4249<br>16. Yuliana Heri Suselo, Dono Indarto , Brian Wasita , Hartono Hartono, Alkaloid fraction of *Mirabilis jalapa Linn.* flowers has low cytotoxicity and increases iron absorption through Erythropoietin-Matriptase-2-Hepcidin pathway in iron deficiency Hepatocarcinoma cell model, Saudi Journal of Biological Sciences Volume 30, Issue 1, January 2023, 103508<br>17. Rivan Danuaji, Suroto Suroto, Bambang Purwanto, Dono Indarto, Faizal Muhammad, Diah Kurnia Mirawati, Vitri Widyaningsih, Soetrisno Soetrisno, Subandi Subandi, Pepi Budianto, Yetty Hambarsari, Baarid Luqman Hamidi, Hanindia Riani Prabaningtyas, Ervina Arta Jayanti |

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| | Hutabarat, Ira Ristinawati, Teddy Tejomukti, Raden Andi Ario Tedjo, Serum vaspin role in atherosclerosis and glucose tolerance disorders: A systematic review and meta-analysis, Journal of Applied Pharmaceutical Science Vol. 13(01), pp 024-041, January, 2023<br>18. Rivan Danuaji, MD, Suroto Suroto, Bambang Purwanto, Dono Indarto, PhD, Faizal Muhammad, MD, Diah K. Mirawati, MD, Vitri Widyaningsih, PhD, Soetrisno Soetrisno, Subandi Subandi, MD, Pepi Budianto, MD, Yetty Hambarsari, MD, Baarid L. Hamidi, MD, Hanindia R. Prabaningtyas, MD, Ervina A.J. Hutabarat, MD, Ira Ristinawati, MD, Teddy Tejomukti, MD and Raden A.A. Tedjo, MD, Association between carotid intima media thickness and acute ischemic stroke at an Indonesian tertiary referral hospital, Journal of Taibah University Medical Sciences (2023) 18(4), 771-777<br>19. Liyana Ilmiyati, Dono Indarto.i, and Brian Wasita, Anemia in female adolescents at Karanganyar regency: A cross-sectional study associated with polymorphism of duodenal cytochrome B gene and daily consumptions of fruits and vegetables, First published online September 13, 2023<br>20. Evi Nurhayatun, Bambang Purwanto, Soetrisno Soetrisno, Dono Indarto, Eti Poncorini, Tatar Sumandjar, Febriola Hotmaida Sagala, Dalilah Salsabila Salma, The beneficial effect of the ethanolic extract Etlingera elatior fruit on IL-1ß and caspase-3 levels in sepsis mice model, Journal of Applied Pharmaceutical Science Vol. 13(06), pp 116-120, June, 2023<br>21. Ladyamayu Pinasti, Dono Indarto, Vitri Widyaningsih, Hubungan Asupan Harian Buah-Buahan dan Kacang-Kacangan Serta Aktivitas Fisik dengan Indeks Massa Tubuh Menurut Umur Pada Remaja Putri Overweight di Pondok Pesantren Darussalam Gontor, Vol. 5 No. 1 (2023): Prosiding Temu Ilmiah Nasional PERSAGI Tahun 2023<br>22. Sinu Andhi Jusup, Muhsin Douwes, Bambang Purwanto, Dono Indarto, Effect of Morning and Afternoon Exercise on the Improvement of Endothelial Dysfunction in Type-2 Diabetes Mellitus Patients, Mal J Med Health Sci 20(2): 168-174, March 2024<br>23. Arifin Arifin, Bambang Purwanto, Dono Indarto, Brian Wasita, Tatar Sumanjar, Eti Poncorini Pamungkasari, Soetrisno Soetrisno, Improvement of renal functions in mice with septic acute kidney injury using secretome of mesenchymal stem cells, Saudi Journal of Biological Sciences 31 (2024) 10393 |

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| | 51. Ni Nyoman Ratna Sri Dewi, Pitra Sekarhandini, Aisya Fikritama Aditya, Provision of Anti-Tuberculosis Treatment on Nutritional Status in Children with Pulmonary Tuberculosis at Dr. Moewardi Hospital, Surakarta, Central Java, Journal of Maternal and Child Health (2025), 10(04): 213-223 Masters Program in Public Health, Universitas Sebelas Maret<br>52. Durotul Baruroh, Yuliana Heri Suselo, Ratna Kusumawati, Dono Indarto, Effect of Freeze-Drying, Spray-Drying, and Foam-Mat-Drying Encapsulation Techniqueson Vitamin C Levelin Fruit Powder: A Scoping Review, Journal of Health and Nutrition Research, Vol. 4, No. 3, 2025, pg. 1036-1047<br>53. Anung Noto Nugroho, Soetrisno Soetrisno, Ambar Mudigdo, Kristanto Yuli Yarso, Dono Indarto, Akmal Zhahir Wahyudi, Enrico Ananda Budiono, Auliya Yudia Yasyfin, Innovative strategies in bile duct repair: Assessing efficacy and safety across varied graft techniques - A systematic review, Surgery Open Science 24 (2025) 5–15<br>54. Sandy Armandha Adianto Djojosugito, Paramasari Dirgahayu, Ratih Dewi Yudhani, Rieva Ermawan, Muthmainah Muthmainah, Dono Indarto, Brian Wasita, Repurposing halofuginone derivatives for osteoarthritis therapy: Structural insights, multi-target inhibition, and pharmacokinetic profiling, Chemical Physics Impact 11 (2025) 100969<br>55. Puri Dwi Andina, Dono Indarto, Lusi Oka Wardhani, Phytochemical And Nutrient Analysis Of Ethanol Extract Salak Pondoh (Sallaca Edulis Reinw) Peel For Development Of Anti-Obesity, Vol. 35 No. 2 (2025): Media Penelitian Dan Pengembangan Kesehatan<br>56. Siti Maesaroh, Soetrisno, Harijono Kario Sentono, Dono Indarto, Therapeutic Potential of Muli Banana Peel Extract on Modulating Inflammation, Proliferation, and Apoptosis in A Rat Model of Endometriosis, Vol. 22 No. 12 (2025): Trends In Sciences, Volume 22, Number 12, December 2025<br>57. Hafi Nurinasari, Fitrine Ekawasti, Sajidan, Bambang Purwanto, Dono Indarto, Soetrisno, Ariva Syiva'a, Didik Tulus Subekti, Sri Suryatmiati Prihandani, Anti-toxoplasma effect of *Moringa oleifera* leaves in a rat model of toxoplasmosis-induced pregnancy, Open Vet J. 2025 Aug 31;15(8):3878–3887 |

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| | 58. Anung Noto Nugroho, Soetrisno Soetrisno, Ambar Mudigdo, Kristanto Yuli Yarso, Dono Indarto, Akmal Zhahir Wahyudi, Expression of Vascular Endothelial Growth Factor and Interleukin-6 in bile duct healing with autologous parietal peritoneum: a non-inferiority experimental study in rabbits, PeerJ. 2025 Jun 9;13:e19306<br>59. Winda Rizki Pebrina Batubara, Tri Nugraha Susilawati, Dono Indarto, Analysis of Naringin and Hesperidin Compounds in Berastagi Sweet Orange (*Citrus Sinensis L*) Peel Extract, Engineering Headway (Volume 14), January 2025<br>60. Jihan Firdaus, Dono Indarto, Shanti Listyawati, Enhancing Anthocyanin Butterfly Pea Stability using Encapsulation: A Scoping Review of Coating Materials and Techniques, Journal of Health and Nutrition ResearchVol. 4, No. 3, 2025, pg. 1343-1353<br>61. Astari Pranindya-Sari, Reviono, Agus Dwi Susanto, Dono Indarto, The Potential of Chromatographic and Chemometric Profiling as Early Detection Tools for Metabolic Disturbances in Third-Hand Smoke-Exposed Rats: An Exploratory Study, Vol. 22 No. 7 (2025): Trends In Sciences, Volume 22, Number 7, July 2025<br>62. Eva Susilawati , Dono Indarto, Tri Nugraha Susilawati, Identification of nutrients and phytochemicals of raja banana (Musa acuminata) peels extracted with ethanol and acetone solvents and its potential as an anti-obesity agent, Aceh. Nutri. J. 2025; 10(2)<br>63. Yulice Soraya Nur Intan, Soetrisno, Abdurahman Laqif, Dono Indarto, Paramasari Dirgahayu, Eti P. Pamungkasari, Agung Putra, Secretome from Human Umbilical Cord Mesenchymal Stem Cells Ameliorates Ovarian Aging in a Murine Model, Vol. 23 No. 10 (2026): Trends In Sciences, Volume 23, Number 10, October 2026<br>64. Dono Indarto, Tri N. Susilawati, Yuliana H. Suselo, Purwo S. Rejeki, Yuxi Feng, Yohanes C. Wibowo And Melani R. Mahanani, Metabolic gene polymorphisms and type 2 diabetes mellitus risk: A systematic review and meta-analyses, Experimental And Therapeutic Medicine 31: 54, 2026<br>65. Dwi Cahyo Kartiko, Purwo Sri Rejeki, Dono Indarto, Irmantara Subagio, Sasminta Christina Yuli Hartati, Bekir Erhan Orhan, Yuni Nurwati and Adi Pranoto, Combination Training Improves Leptin Regulation, Reduces Body Fat, and Increases Skeletal Muscle Mass in Obese Females, Physical Education Theory and Methodology. Vol. 26, Num. 2 |

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| | 66. Astari Pranindya-Sari, PhD, MD-Pulmonologist, MSc , Reviono, PhD, MD-Pulmonologist , Agus Dwi Susanto, PhD, MD-Pulmonologist , Dono Indarto, PhD, MD , Paramasari Dirgahayu, PhD, MD, Pyroptosis: An Inflammatory Response to Toxic Effect of Cigarette Exposure, *Nicotine & Tobacco Research*, Volume 28, Issue 3, March 2026, Pages 328–339<br>67. Fista Utami, Dono Indarto and Shanti Listyawati, Research Article Beneficial Effects of Clitoria ternatea Flower and Citrus limonFruit Beverage on Nutritional Status, Lipid Profile, and AdipokineParameters on Male Rats With Obesity, Journal of Obesity, Volume 2026<br>68. Hanif Hary Setyawan, Husnia Auliyatul Umma, Sri Lilijanti Widjaja, Hubungan Penggunaan Alat Medis Invasif dengan Kejadian Infeksi Organisme Resisten Multidrug pada Pasien Anak, Sari Pediatri, Vol. 27, No. 5, Februari 2026<br>69. Annang Giri Moelyo, David Anggara Putra, Irfan Dzakir Nugroho, Pitra Sekarhandini, Hanum Ferdian, Hari Wahyu Nugroho, Exploring pediatric residents' perspectives on effective communication: a qualitative study, Paediatrica Indonesiana, Vol. 66, No. 4, July 2026<br>70. Asti Pramita Sari, David Anggara Putra, Septin Widiretnani, Risk Factors for Prolonged Hospitalization in Children with Acute Lymphoblastic Leukemia and Pneumonia, Journal of Maternal and Child Health (2026), 11(03): 185-199, Master's Program in Public Health, Universitas Sebelas Maret<br>71. Rabi'atul Adawiyah, Sandi Nugraha, Pridania Vidya, Focal Dermal Hypoplasia (Goltz Syndrome) in a 4 -Year- Old Girl: A, Journal of Biomedicine and Translational Research, 12 (2) 2026,148-152<br>72. Kezia Elian Devina, Aurelia Alisa Putri Larasati, Nanda Jhaneta Pricela, Andika Prasetyo, Dono Indarto, Tri NugrahaSusilawati and Heru Sulastomo, Insilicoand In vivoStudies of Raja Banana Peel Extract as Anti-Obesity on Lipid Profile and Adipokines in Male Rats with Obesity, TRENDS IN SCIENCES 2026; 23(1): 11243<br>73. Ladyamayu Pinasti, Dono indarto, Vitri Widyaningsih, The Impact of Daily Nut-Based Snacks and PreMeal Fruit Intake on Weight of Overweight Female Adolescents in East Java, Indonesia, International Journal of Nutrition Sciences, 2026<br>74. Nur Alam, Soetrisno, Dono Indarto, and Yulia Lanti Retno Dewi, Therapeutic Effects of Mirabilis jalapa Linn.Yellow Flower Extract on Iron Homeostasis and Fetal Development in Pregnant Ratswith Anemia, TRENDS IN SCIENCES 2026; 23(11): 13402 |

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| | 75. Rudiansyah Harahap, Pamudji Utomo, Paramasari Dirgahayu, Eti Poncorini Pamungkasari, Dono Indarto, Rieva Ermawan, Ratih Dewi Yudhani, Performance of Distal and Proximal First Metatarsal Osteotomy in Hallux Valgus Surgery: A Systematic Review and Meta-Analysis, Orthop Rev (Pavia). 2026 Mar 21;18:158949<br>76. Yulice Soraya Nur Intan, Soetrisno Soetrisno, Abdurahman Laqif, Dono Indarto, A preliminary investigation of gene expression and levels of FSH, IL-10, and TNF-α and histological staining in natural aging mice, Turk J Obstet Gynecol. 2026 Mar 5;23(1):71–80<br>77. Anita, Diyah C., Indarto, Dono, Purwanto, Bambang, Widyaningsih, Vitri, Dirgahayu, Paramasari, Wasita, Brian, SuryawatI, Betty, Synergistic Potential of Cinnamomum burmannii Bark Oil Constituents and Zinc Oxide Nanoparticles Anti-TNF Alpha Antagonist, Tropical Journal of Natural Product Research, 2026, v. 10, n. 6, p. 9699<br>78. Jeffrey Ariesta Putra, Dono Indarto, Paramasari Dirgahayu, Shifting Frontiers in Hernia Surgery: Bibliometric Insight into Minimally Invasive Ventral and Incisional Repair, World Journal of Laparoscopic Surgery, VOLUME 19 , ISSUE S1 ( August, 2026 ) |

| Tahap | Kemampuan akhir/ Sub-CPMK (Kode CPL) | Materi Pokok | Referensi | Metode Pembelajaran | | Waktu | Pengalaman Belajar | Penilaian* | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Luring | Daring | | | Basis Penilaian | Teknik Penilaian | Indikator /kode CPL | Teknik penilaian /bobot |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Pengayaan | 1. Mahasiswa mampu memahami dasar-dasar biologi molekuler<br>2. Mahasiswa mampu memahami kasus-kasus anak dengan dasar biologi molekuler<br>3. Mahasiswa mampu memahami dasar-dasar farmakologi klinik<br>4. Mahasiswa mampu | 1. Biologi molekuler<br>2. Farmakologi klinik | 1. Farmakologi dasar<br>2. Biologi molekuler | • Penanganan Pasien poliklinik<br>• *Bed side teaching* | • Kuliah<br>• Presentasi Kasus<br>• Diskusi Kasus | 6 Jam/ minggu | • Kuliah interaktif<br>• Diskusi Kasus<br>• Tutorial | Diskusi Kasus Ujian Tertulis | Diskusi Kasus Ujian Tertulis | PLO2<br>PLO3<br>PLO4<br>PLO5<br>PLO6<br>PLO7 | 100% |

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| | menerapkan ilmu farmakologi klinik pada kasus infeksi dan non infeksi anak, neonatus dan kegawatan | | | | | | | | | | |

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| | **RANCANGAN TUGAS**<br>**PROGRAM STUDI ILMU KESEHATAN ANAK**<br>**FAKULTAS KEDOKTERAN**<br>**UNIVERSITAS SEBELAS MARET** | | | | |
| | | | | | |
| **Identitas Mata Kuliah** | | | | | |
| **Kode Mata Kuliah** | **:** | KBIKA4 | **Bentuk Tugas** | **:** | Refleksi kasus, Bed Side Teaching, Praktek Pengelolaan Pasien, Tugas Jaga, WBPA (Minicex,CbD, DOPS), Ujian |
| **Nama Mata Kuliah** | **:** | Biologi Molekuler dan Farmakologi Klinik | **Waktu/Lama Pengerjaan** | **:** | 6 Jam/ minggu |
| **Bobot Mata Kuliah (sks)** | **:** | 1 SKS | **Judul Tugas** | **:** | Biologi Molekuler dan Farmakologi Klinik |
| **Semester** | **:** | 1 | **Dosen Pengampu** | **:** | Prof. Dono Indarto,dr,M.Biotech.St,Ph.D, AIFM<br>dr. Pudjiastuti, Sp.A, Subsp. ETIA(K)<br>dr. Husnia Auliyatul Umma, Sp.A, M.Kes<br>dr. Andhika Trisna Putra, Sp. A, Subsp. Neo(K), M.Biomed<br>dr. Sandi Nugraha, Sp.A, Subsp.NPM(K), M.Biomed<br>dr. David Anggara Putra, Sp.A, MH<br>dr. Pitra Sekarhandini, Sp.A |
| | | | | | |
| **CPMK** | : | 1. Mahasiswa mampu memahami dasar-dasar biologi molekuler<br>2. Mahasiswa mampu memahami kasus-kasus anak dengan dasar biologi molekuler<br>3. Mahasiswa mampu memahami dasar-dasar farmakologi klinik<br>4. Mahasiswa mampu menerapkan ilmu farmakologi klinik pada kasus infeksi dan non-infeksi anak, neonatus dan kegawatan | | | |
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| **Sub CPMK** | : | 1. Memahami dasar-dasar biologi molekuler<br>2. Memahami kasus-kasus anak dengan dasar biologi molekuler<br>3. Memahami dasar-dasar farmakologi klinik<br>4. Menerapkan ilmu farmakologi klinik pada kasus infeksi dan non-infeksi anak, neonatus dan kegawatan |
| | | |
| **Deskripsi Tugas** | : | Mahasiswa memahami dasar biologi molekuler dan farmakologi klinik pada setting di klinis baik kasus infeksi dan non infeksi anak, neonatus dan kegawatan. |
| | | |
| **Metode Pengerjaan Tugas** | : | 1. Refleksi kasus : 1 kasus x 5 hari x 5 minggu<br>2. Bed Side Teaching : 3 pasien x 5 hari x 5 minggu<br>3. Praktek Pengelolaan Pasien : 3 pasien x 5 hari x 6 minggu<br>4. Tugas Jaga : 4 x 1,5 bulan<br>5. WBPA (Mini Cex, CbD, DOPS)<br>6. Ujian |
| | | |
| **Bentuk dan Format Luaran** | : | Bentuk Luaran: Laporan Refleksi Kasus<br>Format Luaran:<br>1. Skenario Kasus<br>2. Learning Objective<br>3. Hasil Diskusi |
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| **Indikator, Kriteria, Bobot Penilaian** | : | **Rubrik Penilaian Diskusi (20%)** |

| No | Nama dan NIM Mahasiswa | Kemampuan untuk bekerjasama dalam kelompok | | | | | | | | Kemampuan memilih Informasi | | | | Kemampuan untuk berpikir kritis dan melakukan analisis | | | | | | | | | | | | Jumlah nilai |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Kemampuan menghargai orang lain * | | | | Keaktifan / Kontribusi dalam kelompok * | | | | Kualitas informasi* | | | | Kemampuan untuk mendefinisikan / menyebutkan permasalahan * | | | | Kemampuan membuat hubungan dari berbagai data / fakta* | | | | Kemampuan Menganalisis dan mensintesis data / fakta* | | | | |
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
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**INSTRUKSI:** *Berikan tanda ceklis (v) pada kolom SKOR yang sesuai*

| NO | ITEM YANG DINILAI | | SCORE | KETERANGAN |
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| I | Kemampuan untuk bekerjasama dalam kelompok | a. Kemampuan menghargai orang lain | 1 | Selalu mendebat orang lain, tidak memberi kesempatan bicara pada orang lain, sering "menyerang"dan menjatuhkan pendapat orang lain, tidak mau menerima pendapat orang lain. |
| | | | 2 | Sering bicara sendiri , Sering tidak memberi perhatian ketika orang lain berbicara, tidak "menyerang" pendapat orang lain tetapi sering hanya mengiyakan pendapat orang lain. |
| | | | 3 | Secara umum mendengarkan pendapat orang lain, menggunakan bahasa yang tepat dan sopan, menunjukkan usaha untuk memahami / mengerti pendapat orang lain. |
| | | | 4 | Selalu mendengarkan pendapat orang lain dan menghargai pendapat orang lain. Menunjukkan usaha untuk memahami / mengerti pendapat orang lain.Tampak berusaha membantu orang lain agar dapat mengungkapkan pendapatnya , Tampak berusaha agar kelompoknya dapat mencapai suatu kesepakatan bersama |
| | | b. Keaktifan / Kontribusi dalam kelompok | 1 | Tidak pernah memberikan informasi / pendapat walaupun sudah diberi dorongan |
| | | | 2 | Ikut memberikan informasi / pendapat tapi hanya saat diberi dorongan. |
| | | | 3 | Kadang – kadang Ikut memberikan informasi / pendapat tanpa harus diberi dorongan. |
| | | | 4 | Selalu memberikan informasi / pendapat tanpa harus diberi dorongan. |
| II | Kemampuan mengumpulkan Informasi ( *Information Literacy* ) | a. Kualitas informasi | 1 | Memberikan informasi yang tidak ada hubungannya dengan topik yang sedang dibicarakan,atau hanya menyebutkan kembali topik utama yang sedang dibicarakan |
| | | | 2 | Memberikan informasi yang sedikit hubungannya dengan topik yang sedang dibicarakan |
| | | | 3 | Memberikan informasi yang jelas hubungannya dengan topik yang sedang dibicarakan |
| | | | 4 | Memberikan informasi yang sangat jelas hubungannya dengan topik yang sedang dibicarakan, dan mampu menambahkan konsep baru ataupun informasi baru |
| III | Kemampuan untuk berpikir kritis dan melakukan analisis | a. Kemampuan untuk mendefinisikan / menyebutkan permasalahan | 1 | Belum mampu mendeskripsian apa yang menjadi permasalahan |
| | | | 2 | Sudah mampu mendeskripsikan apa yang menjadi permasalahan, namun hanya sebagian |
| | | | 3 | Mampu mendeskripsikan secara akurat apa yang menjadi permasalahan |
| | | | 4 | Mampu mendeskripsikan secara akurat apa yang menjadi permasalahan , dan sudah mampu membuat pertanyaan untuk memperoleh informasi yang diperlukan |
| | | b. Kemampuan membuat hubungan dari berbagai data / fakta | 1 | Tidak mampu membangun suatu konsep baru, Tidak mampu mengenali hubungan dari berbagai data yang ada. |
| | | | 2 | Mampu membuat konsep baru walaupun masih sedikit / jarang, mampu mengenali hubungan dari berbagai data yang ada namun hanya dalam jumlah yang sedikit / jarang |
| | | | 3 | Mampu membuat konsep baru, mampu mengenali hubungan dari berbagai data yang ada |
| | | | 4 | Mampu membuat konsep baru dengan sangat jelas, mampu mengenali hubungan dari berbagai data yang ada dengan sangat baik |
| | | c. Kemampuan Menganalisis dan mensintesis data / fakta | 1 | Hanya mengulang / menyebutkan kembali informasi yang didapatkan tanpa melakukan analisis; pernyataan yang diberikan tidak didasari bukti / data. |
| | | | 2 | Sudah mencoba melakukan analisis, namun dangkal. Pernyataan yang diberikan sudah didasari bukti / data,namun hanya sedikit |
| | | | 3 | Melakukan analisis dengan cukup teliti, Pernyataan yang diberikan didasari bukti / data yang baik |
| | | | 4 | Melakukan analisis dengan sangat teliti dan detail untuk semua informasi, Pernyataan yang diberikan selalu didasari bukti / data yang baik |

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| **Waktu Pelaksanaan** | : | 6 minggu |
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| **Lain-Lain** | : | - |
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| **Daftar Rujukan** | : | **Buku ajar**:<br>1. Farmakologi dasar<br>2. Biologi molekuler<br>**Jurnal** :<br>1. Syahmi Amar, Rustam Siregar, Husnia Auliyatul U, Ramsay Hunt Syndrome: A Case Report, Asia Pacific Journal of Paediatri Child Health, Volume 4, Apr - Jun 2021<br>2. Yanuar Ariefudin, Husnia Auliyatul Umma, Fadhilah Tia Nur, Harsono Salimo, Usia Gestasi Sebagai Prediktor Keberhasilan Terapi Antibiotik Empiris pada Infeksi Neonatorum di Rumah Sakit Umum Daerah Dr. Moewardi Surakarta, Sari Pediatri, Vol. 24, No. 3, Oktober 2022<br>3. Hendra Wardhana, Muhammad Riza, Husnia Auliyatul Umma, Differences Levels of Sodium, Potassium, Calcium, and Magnesium Before and After Cisplatin Administration in Child with Osteosarcoma, Journal of Maternal and Child Health (2022), 07(05): 609-617<br>4. Yulistya Hani, Evi Rokhayati, David Anggara Putra, Hubungan Pengetahuan Ibu tentang Diare dengan Kejadian Diare pada Balita di Wilayah Kecamatan Jebres Surakarta, Plexus Medical Journal, Vol 1 (6) 2022 : 219 – 223<br>5. Fista Utami, Dono Indarto and Shanti Listyawati, Enhancement of Flavonoid and Anthocyanin Levels of Herbal Beverage Containing Butterfly Pea Flower and Lemon Fruit to Improve Anti-oxidant Activity, ICSDH 2022 - The International Conference on Social Determinants of Health<br>6. Agus Sucianto, Pudjiastuti, Diah Lintang Kawuryan, The Role of Ferritin Serum Level as Predictor Sepsis Mortality on Children in Dr. Moewardi Hospital of Surakarta, Journal of Maternal and Child Health (2023), 08(02): 210-216 |

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| | | 7. Belvathilda Jennidan Moedjiono, Evi Rokhayati, David Anggara Putra, Hubungan Aktivitas Fisik Dengan Konstipasi Pada Santri Pondok Pesantren di Kabupaten Sidoarjo, Plexus Medical Journal, Vol 2 (2) 2023: 70 – 76<br>8. Arie Falah, Septin Widiretnani, Husnia Auliyatul Umma, Pengaruh Toksisitas Hematologi Fase Konsolidasi Terhadap Kesintasan Pasien Leukemia Limfoblastik Akut di Rumah Sakit Umum Daerah Dr. Moewardi Surakarta, Sari Pediatri, Vol. 24, No. 5, Februari 2023<br>9. Asna Puja Maharani Yumi, Husnia Auliyatul Umma, Ismiranti Andarini, The Correlation between Antiretroviral Therapy Adherence and Quality of Life in Children with HIV/AIDS at Dr. Moewardi General Hospital Surakarta Indonesia, Asia Pacific Journal Paediatr Child Health, Volume 6, Jul - Sep 2023<br>10. Aqillah Azzah, Evi Rokhayati, Husnia Auliyatul Umma, Hubungan Pemberian ASI Eksklusif dan Susu Formula Terhadap pH Feses Bayi 0-6 Bulan, Plexus Medical Journal, Vol 2 (5) 2023: 197 – 205<br>11. Diaz Alifarizki Zuvarcan, David Anggara Putra, Sri Martuti, Correlation between Preeclampsia and Infant Low Birth Weightat Dr. Moewardi Hospital, Surakarta, Central Java, Indonesia, Journal of Maternal andChild Health (2023), 09(01): 28-37<br>12. Agus Sucianto, Pudjiastuti, Diah Lintang Kawuryan, The Role of Ferritin Serum Level as Predictor Sepsis Mortality on Children in Dr. Moewardi Hospital of Surakarta, Journal of Maternal and Child Health (2023), 08(02): 210-216<br>13. Dhoni Akbar Ghozali, Muchsin Doewes, Soetrisno Soetrisno, Dono Indarto, Muhana Fawwazy Ilyas, Dose-response effect of L-citrulline on skeletal muscle damage after acute eccentric exercise: an *in vivo* study in mice, Biochemistry, Biophysics And Molecular Biology, 2023<br>14. Aqillah Azzah, Evi Rokhayati, Husnia Auliyatul Umma, Hubungan Pemberian ASI Eksklusif dan Susu Formula Terhadap pH Feses Bayi 0-6 Bulan, Plexus Medical Journal, Vol 2 (5) 2023: 197 – 205<br>15. Inayati, Inayati; Arifin, Nuha H.; Febriansah, Rifky; Indarto, Dono; Suryawati, Betty; Hartono, Hartono, Trans-Cinnamaldehyde Inhibitory Activity Against mrkA, treC, and luxS Genes in Biofilm-forming Klebsiella pneumoniae: An In Silico Study, Tropical Journal of Natural Product Research, 2023, v. 7, n. 10, p. 4249 |

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| | | 16. Yuliana Heri Suselo, Dono Indarto , Brian Wasita , Hartono Hartono, Alkaloid fraction of *Mirabilis jalapa Linn.* flowers has low cytotoxicity and increases iron absorption through Erythropoietin-Matriptase-2-Hepcidin pathway in iron deficiency Hepatocarcinoma cell model, Saudi Journal of Biological Sciences Volume 30, Issue 1, January 2023, 103508<br>17. Rivan Danuaji, Suroto Suroto, Bambang Purwanto, Dono Indarto, Faizal Muhammad, Diah Kurnia Mirawati, Vitri Widyaningsih, Soetrisno Soetrisno, Subandi Subandi, Pepi Budianto, Yetty Hambarsari, Baarid Luqman Hamidi, Hanindia Riani Prabaningtyas, Ervina Arta Jayanti Hutabarat, Ira Ristinawati, Teddy Tejomukti, Raden Andi Ario Tedjo, Serum vaspin role in atherosclerosis and glucose tolerance disorders: A systematic review and meta-analysis, Journal of Applied Pharmaceutical Science Vol. 13(01), pp 024-041, January, 2023<br>18. Rivan Danuaji, MD, Suroto Suroto, Bambang Purwanto, Dono Indarto, PhD, Faizal Muhammad, MD, Diah K. Mirawati, MD, Vitri Widyaningsih, PhD, Soetrisno Soetrisno, Subandi Subandi, MD, Pepi Budianto, MD, Yetty Hambarsari, MD, Baarid L. Hamidi, MD, Hanindia R. Prabaningtyas, MD, Ervina A.J. Hutabarat, MD, Ira Ristinawati, MD, Teddy Tejomukti, MD and Raden A.A. Tedjo, MD, Association between carotid intima media thickness and acute ischemic stroke at an Indonesian tertiary referral hospital, Journal of Taibah University Medical Sciences (2023) 18(4), 771-777<br>19. Liyana Ilmiyati, Dono Indarto.i, and Brian Wasita, Anemia in female adolescents at Karanganyar regency: A cross-sectional study associated with polymorphism of duodenal cytochrome B gene and daily consumptions of fruits and vegetables, First published online September 13, 2023<br>20. Evi Nurhayatun, Bambang Purwanto, Soetrisno Soetrisno, Dono Indarto, Eti Poncorini, Tatar Sumandjar, Febriola Hotmaida Sagala, Dalilah Salsabila Salma, The beneficial effect of the ethanolic extract Etlingera elatior fruit on IL-1ß and caspase-3 levels in sepsis mice model, Journal of Applied Pharmaceutical Science Vol. 13(06), pp 116-120, June, 2023<br>21. Ladyamayu Pinasti, Dono Indarto, Vitri Widyaningsih, Hubungan Asupan Harian Buah-Buahan dan Kacang-Kacangan Serta Aktivitas Fisik dengan Indeks Massa Tubuh Menurut Umur Pada Remaja Putri Overweight di Pondok Pesantren Darussalam Gontor, Vol. 5 No. 1 (2023): Prosiding Temu Ilmiah Nasional PERSAGI Tahun 2023<br>22. Sinu Andhi Jusup, Muhsin Douwes, Bambang Purwanto, Dono Indarto, Effect of Morning and Afternoon Exercise on the Improvement of Endothelial Dysfunction in Type-2 Diabetes Mellitus Patients, Mal J Med Health Sci 20(2): 168-174, March 2024 |

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| | | 23. Arifin Arifin, Bambang Purwanto, Dono Indarto, Brian Wasita, Tatar Sumanjar, Eti Poncorini Pamungkasari, Soetrisno Soetrisno, Improvement of renal functions in mice with septic acute kidney injury using secretome of mesenchymal stem cells, Saudi Journal of Biological Sciences 31 (2024) 10393<br>24. Fitriana Fitriana, Soetrisno Soetrisno, Sri Sulistyowati, Dono Indarto, Evaluation of placental bed uterine in L-NAME-induced early-onset preeclampsia (EO-PE) like the rat model, Turk J Obstet Gynecol 2024;21:180-9<br>25. Fatimah Mayasyari, Husnia Auliyatul Umma, Sri Martuti, The relationship between preterm birth and the incidence of Multidrug Resistance Organisms (MDRO) in neonates at Dr. Moewardi Hospital Surakarta, Asia Pacific Journal of Paediatrics Child and Health, Volume 7, Jan - Mar 2024<br>26. Reza Ervanda Zilmi, Pudjiastuti, Rustam Siregar, The Role of Lactate Levelas Predictor of MortalityCritically Ill Children at Moewardi Hospital, Journal of Maternal and Child Health (2024), 09(01): 89-96<br>27. Evi Rokhayati, Yulistya Hani, David Anggara Putra, Hubungan Sanitasi Lingkungan Dengan Kejadian Diare Pada Balita Di Kecamatan Jebres Surakarta, Avicenna : Journal of Health Research, Vol 7 No 1. Maret 2024 (85 - 91)<br>28. David Anggara Putra, Mulyanto, Legal Protection Against Tobacco Smoke Harmful Effects on Children, Vol. 5 No. 2 (2024): (JLPH) Journal of Law, Politic and Humanities<br>29. David Anggara Putra, Pitra Sekarhandini, Annang Giri Moelyo, Identifying competency gaps in intraand post-learning of a pediatric residency program: a qualitative study, Paediatrica Indonesiana, Vol. 64, No. 6, November 2024<br>30. Rafli Yuda Pamungkas, Pitra Sekarhandini, Annang Giri Moelyo, Perbandingan Lingkar Leher dan Indeks Massa Tubuh terhadap Body Fat pada Siswa Sekolah Dasar, Sari Pediatri, Vol. 25, No. 6, April 2024<br>31. Farras Handyra Putra, Husnia Auliyatul Umma, Annang Giri Moelyo, Hubungan Durasi Tidur dengan Memori Jangka Pendek pada Siswa Sekolah Dasar, Sari Pediatri, Vol. 26, No. 3, Oktober 2024<br>32. Fitriana Fitriana, Sri Sulistyowati, Dono Indarto, Soetrisno Soetrisno, Vitri Widyaningsih, Ida Nurwati, Effect of kopyor coconut water on early-onset preeclampsia-like impairments in rats induced by L-nitro-arginine methyl ester, Pharmacia 71: 1–11, 2024 |

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**FAKULTAS KEDOKTERAN UNIVERSITAS SEBELAS MARET**
**PROGRAM PENDIDIKAN DOKTER SPESIALIS I**
**ILMU KESEHATAN ANAK**

# NILAI AKHIR EVALUASI KULIAH PENGAYAAN

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| **Nama PPDS** | | **Inisial** | | **NoReg** | |
| **Tahap** | **Pengayaan** | **Pembelajaran** | | | |
| **Unit** | **IKA FK UNS/ RSDM** | | | | |
| **Periode dari tgl** | | **Mata kuliah** | | | |

| **ASPEK YANG DINILAI** | **H A S I L** |
|---|---|
| **Pengetahuan *(Knowledge)* *** | |
| **Keterampilan *(Skill)* *** | |
| **Sikap *(Attitude)* **** | |
| **CATATAN KHUSUS *(ANECDOTAL RECORD)*** | |
| …✍ | |
| Nilai dalam angka, 1 digit di belakang koma | |

| **K E P U T U S A N** | |
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| **NO** | **NAMA PENILAI** | **JABATAN** | **TANDA TANGAN** |
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* Nilai PK satu angka, nilai batas lulus 7.0
** Nilai S : B (baik) atau TB (tidak baik)

| **Rentang Skor (skala 100)** | **Rentang Nilai (skala 5)** | |
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| | **Angka** | **Hurup** |
| ≥85 | 4.00 | A |
| 80 - 84 | 3.70 | A - |
| 75 - 79 | 3.30 | B + |
| 70 - 74 | 3.00 | B |
| 65 - 69 | 2.70 | C + |
| 60 - 64 | 2.00 | C |
| 55 - 59 | 1.00 | D |
| <55 | 0.00 | E |
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Surakarta,

Pelapor,

(Nama DPJP)