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| Module designation | Biophysics |
| Module level, if applicable | Undergraduate |
| Code, if applicable | PIPAUM6603 |
| Subtitle, if applicable | *-* |
| Courses, if applicable | *-* |
| Semester(s) in which the module is taught | Odd |
| Person responsible for the module | Yessi Affriyenni, S.Pd, M.Sc. |
| Lecturer | Yessi Affriyenni, S.Pd, M.Sc.; Vita Ria Mustikasari, S.Pd, M.Pd; Novida Pratiwi, S.Si, M.Sc. |
| Language | Bahasa Indonesia |
| Relation to curriculum | Undergraduate degree program, compulsory, 5th semester. |
| Type of teaching, contact hours | Cooperative Learning, Project-based Learning |
| Workload | 1. Lectures: 2x 50 = 100 minutes (1.67 hours) per week.
2. Exercises and Assignments: 2 x 60 = 120 minutes (2 hours) per week.
3. Private study: 2 x 60 = 120 minutes (2 hours) per week.
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| Credit points | 2 credit points (~3.17 ECTS-eq). |
| Requirements according to the examination regulations | A student must have attended at least 80% of the lectures to sit in the exams. |
| Recommended prerequisites | Basic Physics II, Basic Biology II |
| Module objectives/intended learning outcomes | After completing this module, a student is expectedto:LO4 Analysing biological phenomena in critical terms based on physics as a support in developing integrated science by utilizing ITLO4 Creating scientific ideas from literature review on biophysical applications creatively by utilizing ITLO11 Designing application product design that are useful for solving problems related to phenomena in everyday life related to biophysics |
| Content | (1) Biomechanics, (2) Biofluida, (3) Bioenergetika, (4) Bioelectric on human and animals, (5) Application of mechanical and electromagnetic waves on human, (6) Bioradiation, (7) Biooptics on human and animals. |
| Study and examination requirements and forms of examination | Mid-term examination and product |
| Media employed | LCD, websites, SIPEJAR |
| Reading list | 1. Davidovits, P. 2012. *Physics in Biology and Medicine. Complementary Science* (4th edition). Boston: Academic Press.
2. Ewen, D,. Schurter, N. & Gundersen, P. E. 2012. *Applied Physics.* New York: Pearson Education, Inc.
3. Herman, I.P. 2008. *Physics of the Human Body*. New York: Springer
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