

Email: ipa.fmipa@um.ac.id

Website: <http://ipa.fmipa.um.ac.id/>

Module designation	Development of Science Learning Media
Module level, if applicable	Undergraduate
Code, if applicable	PIPAUM6702
Subtitle, if applicable	-
Courses, if applicable	-
Semester(s) in which the module is taught	Even/Autumn Term
Person responsible for the module	Agung Mulyo Setiawan, S.Pd., M.Si
Lecturer	Agung Mulyo Setiawan, S.Pd., M.Si, Dr. Munzil, M.Si; Muhammad Fajar Marsuki, S.Pd., M.Sc; Isnani Juni Fitriyah, S.Pd., M.Si
Language	Bahasa Indonesia
Relation to curriculum	Undergraduate degree program, elective, 4th or 8th semester.
Type of teaching, contact hours	Cooperative Learning, 150 minutes
Workload	<ol style="list-style-type: none"> 1. Lectures: 3 x 50 = 150 minutes (2,30 hours) per week 2. Exercise and Assigments: 3 x 60 minutes = 180 minutes (3 hours) per week 3. Private Study: 3 x 60 minutes = 180 minutes (3 hours) per week
Credit points	3 credit points (~4.76 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	-
Module objectives/intended learning outcomes	<p>After completing this module, students are expected to:</p> <p>LO 8: master the concept and the principles of management (schools, junior high school laboratory, learning resources) to develop innovative learning and edutainment entrepreneurship in the form of innovative and adaptive props/learning software towards the development of technology and community needs independently, quality, and measureably.</p>

Content	1) History & Development of Astronomy; 2) Time and Calendar according to Astronomy; 3) Falakiyah; 4) Astronomical Coordinate System; 5) Systems, types, and working principles of telescopes
Study and examination requirements and forms of examination	Presentation, Project, Middle Exam, and Final Exam
Media employed	Powerpoint, Website, Computer Laboratory, Learning Applications, moodle (SIPEJAR)
Reading list	<ol style="list-style-type: none"> 1. Burn A, 2007. Media Literacy and School, Practice, Production and Progression. Paul Chapman and Publishing. London 2. Turlow, and Chrispin, 2004. Computer Mediated Communication. Sage Publishions Ltd. London 3. Bozarth J. 2010. Social Media for Trainers: Techniques for Enhancing and Extending Learning (Essential Tools Resource). California: Pfeiffer. 4. Herr N. 2008. The Sourcebook for Teaching Science, Grades 6-12: Strategies, Activities, and Instructional Resources. San Fransisco: Jossey-Bass. 5. Smaldino SE, Lowther DL, & Russell JD. 2011. Instructional Technology and Media for Learning (10th edition). New York: Allyn & Bacon. 6. Supriono E. 2010. Physics Learning Media. Malang: Department of Physics FMIPA UM. 7. Lee O, William W, 2004. Multimedia-based Instructional Design. Preffer. San Fransico
Date of last amendment made	May, 2020