

Module designation	Science Technology Engineering Mathematics
Module level, if applicable	Undergraduate
Code, if applicable	PIPAUM6405
Subtitle, if applicable	-
Courses, if applicable	-
Semester(s) in which the module is taught	Odd/Spring Term
Person responsible for the module	Erni Yulianti, S.Pd., M.Sc
Lecturer	Erni Yulianti, S.Pd., M.Pd Erti Hamimi, S.Pd., M.Sc
Language	Bahasa Indonesia
Relation to curriculum	Undergraduate degree program, compulsory, 5th semester.
Type of teaching, contact hours	Undergraduate degree program: cooperative learning, presentation 3 x 50 = 150 minutes
Workload	1. Lectures: 3 x 50 = 150 minutes (2.5 hours) per week. 2. Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week. 3. Private study: 3 x 60 = 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	After completing this module, students are expected to: LO6: master developmental psychology and learning theories to design, implement, and evaluate innovative and productive science learning oriented to develop students' capability and adaptability towards curriculum, technology, and environmental changes along with the upholding of social sensitivity, cultural, view, and religious diversity.
Content	This course covers the following three main topics: 1) The essence of science, 2) Science literacy, 3) STEM in science learning, 4) STEM analysis as a science learning approach and model, 5) STEM development in the world, 6) STEM learning analysis in the curriculum in Indonesia, 7) Learning design development Science uses a STEM

	approach / model, 8) Developing STEM integrated science learning resources and learning media (educators, prototypes, simple tools).
Study and examination requirements and forms of examination	Assignment, Quiz, Midterm examination, Project
Media employed	LCD, power point, white board, video and moodle (Sipejar)
Reading list	<ol style="list-style-type: none"> <li>1. Poedjiadi, A. 2005. <i>Model Pembelajaran Kontekstual Bermuatan Nilai Sains Teknologi Masyarakat</i>. Bandung: PT. R Rosdakarya.</li> <li>2. Sellers, S.L., Roberts, J., Giovanetto L., Friedrich K. &amp; Hammargren, C. 2007. <i>Reaching All Students, A Resource for Teaching in Science, Technology, &amp; Environments</i> (2<sup>nd</sup> edition). Wisconsin: Center for the Integration of Research, Teaching, and Learning (CIRTL).</li> </ol>
Date of last amendment made	May, 2020