



*Menumbuhkembangkan dan
Memertabatkan Bangsa*

MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
UNIVERSITAS NEGERI JAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCE
MATHEMATICS EDUCATION STUDY PROGRAM

Jl. Rawamangun Muka, RT 11/RW14, Rawamangun, Pulo Gadung East Jakarta City, Special Capital Region Of Jakarta 13220
Email: pend.mat@unj.ac.id, <http://fmipa.unj.ac.id/penmat>

Islamic Education

Module name:	Islamic Education	
Module level, if applicable:	Undergraduate	
Code:	00000012	
Sub-heading, if applicable:		
Classes, if applicable:		
Semester:	1 st / 2 nd	
Module coordinator:	Dr. Fera Kurniadewi, M.Si	
Lecturer(s):	Sari Nurulita, Lc, M.Si	
Language:	Bahasa Indonesia	
Classification within the curriculum:	Compulsory course	
Type of Teaching	Contact hours per week during the semester	Class Size
Lecture (Expository, discussion, exercise)	100 minutes	40
Workload:	Total workload is 340 minutes (3 ECTS) per semester which consists of 100 minutes (0.8 ECTS) learning activity, 120 minutes (1.1 ECTS) structured task and 120 minutes (1.1 ECTS) individual learning per week for 16 weeks.	
Credit points:	3 ECTS	
Prerequisite course(s):		



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<p>Course outcomes:</p>	<p>After taking this course the students have ability to:</p> <p>CLO1. Understand philosophical and theological foundations of Islamic education in college</p> <p>CLO2. Understand the concept of monotheism and its applications in social life</p> <p>CLO3. Understand the concept of humans as divine beings</p> <p>CLO4. Understand the role of religions in building civilization</p> <p>CLO5. Understand Quran as the inspiration of civilization</p> <p>CLO6. Understand Sunnah as the example and inspiration of culture</p> <p>CLO7. Understand ijtihad as mechanism of contextualization of Quran and Sunnah</p> <p>CLO8. Understand the concept of Islamic ethics and aesthetics in the development of science and technology</p> <p>CLO9. Understand work ethics as a form of good deeds</p> <p>CLO10. Understand Islamic concept of fostering in family</p> <p>CLO11. Understand implementation of Islam in multicultural society</p> <p>CLO12. Understand Islamic concept of nation and government</p> <p>CLO13. Understand Islamic concept of environment</p> <p>CLO14. Understand The role of religions in facing contemporary issues: phenomenon of hijrah, jihad, radicals, Islamic moderation, information literacy, and anti corruption culture</p>
<p>Content:</p>	<ol style="list-style-type: none"> 1. Philosophical and theological foundations of Islamic education in college 2. The concept of monotheism and its applications in social life 3. The concept of humans as divine beings 4. The role of religions in life 5. Quran as a main source of Islamic teachings 6. Sunnah as basic professional mental 7. Ijtihad as an effort to maintain the relevance of Islamic teachings in life 8. The concept of Islamic ethics and aesthetics in the development of culture and science and technology 9. Work ethics as a form of good deeds 10. Islamic concept of fostering in family 11. Implementation of Islam in multicultural society 12. Islamic concept of nation and government 13. Islamic concept of environment <p>The role of religions in facing contemporary issues: phenomenon of hijrah, jihad, radicals, Islamic moderation, information literacy, and anti corruption culture</p>



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	14. The role of religions in facing contemporary issues: phenomenon of hijrah, jihad, radicals, Islamic moderation, information literacy, and anti corruption culture																																				
Study/exam achievements:	<p>Examinations are conducted as Unit Tests. There are two-unit tests, each covers 4-5 chapters. The final marks are derived from unit tests(50%) and structured tasks (50%).</p> <table border="1" data-bbox="708 596 1395 1146"> <thead> <tr> <th>No</th> <th>CO</th> <th>Assesment Object</th> <th>Assesment Techniques</th> <th>Weight</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CO 1-9</td> <td>a. Assignment (1st)</td> <td rowspan="5">Written test</td> <td>10%</td> </tr> <tr> <td></td> <td></td> <td>b. Assignment (2nd)</td> <td>10%</td> </tr> <tr> <td></td> <td></td> <td>c. Case-based assignment (3rd)</td> <td>15%</td> </tr> <tr> <td></td> <td></td> <td>d. Case-based assignment (4th)</td> <td>15%</td> </tr> <tr> <td></td> <td></td> <td>e. UTS UAS</td> <td>20%</td> </tr> <tr> <td>Total</td> <td></td> <td></td> <td></td> <td>30%</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>100%</td> </tr> </tbody> </table>	No	CO	Assesment Object	Assesment Techniques	Weight	1	CO 1-9	a. Assignment (1 st)	Written test	10%			b. Assignment (2 nd)	10%			c. Case-based assignment (3 rd)	15%			d. Case-based assignment (4 th)	15%			e. UTS UAS	20%	Total				30%					100%
No	CO	Assesment Object	Assesment Techniques	Weight																																	
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		e. UTS UAS		20%																																	
Total				30%																																	
				100%																																	
Media	Power point presentation, Zoom, textbook, videos																																				



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General Basic Knowledge

Budhism Education

Module name:	Budhism Education	
Module level, if applicable:	Undergraduate	
Code:		
Sub-heading, if applicable:		
Classes, if applicable:		
Semester:	1 st & 2 nd	
Module coordinator:	Dr. Fera Kurniadewi, M.Si	
Lecturer(s):	Ir. Soelijono, M.M	
Language:	Bahasa Indonesia	
Classification within the curriculum:	Compulsory course	
Type of Teaching	Contact hours per week during the semester	Class Size
Lecture (Expository, discussion, exercise)	100 minutes	40
Workload:	Total workload is 340 minutes (3 ECTS) per semester which consists of 100 minutes (0.8 ECTS) learning activity, 120 minutes (1.1 ECTS) structured task and 120 minutes (1.1 ECTS) individual learning per week for 16 weeks.	
Credit points:	3 ECTS	
Prerequisite course(s):		



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Course outcomes:	After taking this course the students have ability to: CLO1. Understand the purpose of Buddhism CLO2. Understand history of Buddhism CLO3. Understand dynamics development of moden Buddhism CLO4. Understand the concept of God and the laws of truth (kesunyataan) CLO5. Understand the concept of humans CLO6. Understand history and contents of Tripitaka CLO7. Understand social dimension of Buddhism
Content:	
Study/exam achievements:	Examinations are conducted as Unit Tests. There are two-unit tests, each covers 4-5 chapters. The final marks are derived from unit tests (45%) and structured tasks (50%).
Media	Power point presentation, Zoom, videos
Literatures	<ol style="list-style-type: none"> 1. AWS, Sudhamek. (2020). Mindfulness Based Business. Jakarta: PTGramedia Pustaka Utama. 2. Chandra, Ariya, Soelijono. (2018). Buku Ajar & Rancangan Pengajaran MPK Agama Buddha. Depok: Universitas Indonesia. 3. Endro, Herman S, (1997). Hari Raya Umat Buddha dan KalenderBuddhis. Jakarta: Yayasan Dhammadipea Arama. 4. Farrer-Halls, Gill. (2000). Buddhist Wisdom. Wheaton, Il: Godsfieldpress. 5. Harris, Ian (ed). (2011). The Illustrated Encyclopedia of Buddhism. Wigston: Anness Publishing Ltd. 6. Keown, Damien (ed). (2000). Contemporary Buddhist Ethics. Richmond: Curzon Press. 7. Van Voorst, Robert E. (2017). Anthology of World Scriptures (9thedition). Boston, USA: Cengage Learning. 8. Widyadharma, MP Sumedha. (2006). Dhamma-Sari. Jakarta: Penerbit Cetiya Vatthu Daya. 9. Widyadharma, MP Sumedha, (1979). Riwayat Hidup Buddha



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	<p>Gotama. Jakarta: Penerbit Cetiya Vatthu Daya.</p> <p>10. Wowor, Carnelis, (2004). Pandangan Sosial Agama Buddha. Jakarta: CV. Nitra Kencana Buana.</p> <p>Wright, Robert. (2017). Why Buddhism is True. New York, NY:Simon & Schuster.</p>
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Catholic Education

Module name:	Catholic Education	
Module level, if applicable:	Undergraduate	
Code:		
Sub-heading, if applicable:		
Classes, if applicable:		
Semester:	1 st / 2 nd	
Module coordinator:	Dr. Fera Kurniadewi, M.Si	
Lecturer(s):	Viana Meilani Prasetio, S.S., M.Pd	
Language:	Bahasa Indonesia	
Classification within the curriculum:	Compulsory course	
Type of Teaching	Contact hours per week during the semester	Class Size
Lecture (Expository, discussion, exercise)	100 minutes	40
Workload:	Total workload is 340 minutes (3 ECTS) per semester which consists of 100 minutes (0.8 ECTS) learning activity, 120 minutes (1.1 ECTS) structured task and 120 minutes (1.1 ECTS) individual learning per week for 16 weeks.	
Credit points:	3 ECTS	
Prerequisite course(s):		



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Course outcomes:	<p>After taking this course the students have ability to:</p> <p>CLO1. Understand oneself's descent and their life purpose as a religious human being who whorship God (Jesus Christ) and as a church member to continue God's redemption in the society</p> <p>CLO2. Understand and fathom the life of Jesus Christ and His redemption</p> <p>CLO3. Have self-realization as church members and actively involved in the society</p> <p>CLO4. Become a kind Catholic student who is sensitive to the surroundings</p>
Content:	<ol style="list-style-type: none"> 1. Understand oneself's descent and their life purpose as a religious human being who whorship God (Jesus Christ) 2. Understand oneself's descent and their life purpose as a religious human being who whorship God (Jesus Christ) and as a church member to continue God's redemption in the society 3. Fathom the life of Jesus Christ and His redemption 4. Realizing oneself as church members and actively involved in the society <p>Realizing oneself as church members and actively involved in the society</p>
Study/exam achievements:	Examinations are conducted as Unit Tests. There are two-unit tests, each covers 4-5 chapters. The final marks are derived from unit tests(70%) and structured tasks (30%).
Media	Power point presentation, Zoom, Google Meet, bible, videos
Literatures	<ol style="list-style-type: none"> 1. Kitab Suci 2. Katolisitas 3. Buku Ajar Mata Kuliah Wajib Umum Pendidikan Agama Katolik Pengajaran Katekese KA]



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UNIVERSITAS NEGERI JAKARTA
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Hinduism Education

Module name:	Hinduism Education	
Module level, if applicable:	Undergraduate	
Code:	00051043	
Sub-heading, if applicable:		
Classes, if applicable:		
Semester:	1 st / 2 nd	
Module coordinator:	Dr. Fera Kurniadewi, M.Si	
Lecturer(s):	Untung Suhardi, S.Pd.H, M.Fil.H	
Language:	Bahasa Indonesia	
Classification within the curriculum:	Compulsory course	
Type of Teaching	Contact hours per week during the semester	Class Size
Lecture (Expository, discussion, exercise)	150 minutes	40
Workload:	Total workload is 340 minutes (3 ECTS) per semester which consists of 100 minutes (0.8 ECTS) learning activity, 120 minutes (1.1 ECTS) structured task and 120 minutes (1.1 ECTS) individual learning per week for 16 weeks.	
Credit points:	3 ECTS	
Prerequisite course(s):		



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FACULTY OF MATHEMATICS AND NATURAL SCIENCE
MATHEMATICS EDUCATION STUDY PROGRAM

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Course outcomes:	After taking this course the students have ability to: CLO1. Explain the purpose of Hinduism CLO2. Understand the history of Hinduism CLO3. Understand the dynamics of education of Hinduism CLO4. Understand moral teachings of Hinduism CLO5. Understand philosophical and theological concept of Hinduism CLO6. Understand the Vedas CLO7. Understand yajna in Hindu CLO8. Understand harmony in diversity
Content:	1. The purpose of Hinduism 2. Understand the history of Hinduism 3. Understand the history of Hinduism 4. Understand moral teachings of Hinduism 5. Understand philosophical and theological concept of Hinduism 6. Understand the Vedas 7. Understand yajna in Hindu Understand harmony
Study/exam achievements:	Examinations are conducted as Unit Tests. There are two-unit tests, each covers 4-5 chapters. The final marks are derived from unit tests(50%) and structured tasks (50%).

No	C O	Assesment Object	Assesse ment Techniqu es	Weigh t
1	C O 1 - 9	a. 1 st assignment b. 2 nd assignment c. 3 rd assignment (case based) d. 4 th assignment (case based) e. UTS UAS	Written test	10% 10% 15% 15% 20%
Total				3 0 % 100%



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UNIVERSITAS NEGERI JAKARTA
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Media	Power point presentation, Zoom, Google Meet, textbook, videos
Literatures	<ol style="list-style-type: none"> 1. Abdullah, Irwan. 2009. <i>Konstruksi dan Reproduksi Kebudayaan</i> cet. III. Yogyakarta : Pustaka Pelajar 2. Adi Suropto. 2006. <i>Nilai-nilai Hindu dalam Budaya Jawa</i>. Jakarta. Media Hindu 3. Adiputra, I Gd Rudia. 2003. <i>Pengetahuan Dasar Agama Hindu</i>. Jakarta : STAH Dharma Nusantara. 4. Bagus, I Putu Suamba. 2007. <i>Siva-Budha Di Indonesia (Ajaran dan perkembangannya)</i>. Denpasar : Widhya Dharma. 5. Donder. I Ketut. 2006. <i>Brahmavidya Theologi Kasih Semesta</i>. Surabaya : Paramita 6. Effendi Djohan. 2001. <i>Agama-Agama Manusia</i>. Obor Indonesia. Jakarta 7. Griffith, R.T.H. 2006. <i>Atharva Veda Samhita (Sukla Yajur Veda)</i>. Surabaya : Paramitha 8. Mantra, IB. 1997. <i>Tata Susila Hindu Dharma</i>. Denpasar : upada sastra, Surabaya : Paramitha. 9. Mas Putra, Ny.IGA. 2000. <i>Panca Yadnya</i>. Denpasar : pemda Tk 1 Bali
	<ol style="list-style-type: none"> 10. Durkheim, Emile.1965. <i>The Elementary Forms of the Religious Life</i>. (terjemahan bahasa Inggris oleh J.W.Swain. Glecoe, Illinois : The Free Press 11. Hadikusuma, Hilman. 1993. <i>Antropologi Agama</i>. Bandung. Citra Aditya Bakti 12. Hendro,Puspito. 1983. <i>Sosiologi Agama</i>. Kanisius. Jogjakarta Koenjaraningrat. 1997. <i>Antropologi Budaya</i>. Jakarta : Dian Rakyat

PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12
CO1	v											
CO2	v											
CO3	v											
CO4	v											
CO5	v											
CO6	v											



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C07	v											
C08	v											



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Algoritma Pemrograman

Module designation	Algoritma Pemrograman
Semester(s) in which the module is taught	1 st semester (odd semester)
Person responsible for the module	Ari Hendarno, S.Pd., M.Kom.
Language	Indonesia
Relation to curriculum	This course is a compulsory course and offered in the 5 th semester.
Teaching methods	Teaching methods used in this course are: <ul style="list-style-type: none"> • Lecture (i.e., small group discussions and project-based learning) • Structured assignments (i.e., project development and presentations)
Workload (incl. contact hours, self-study hours)	For this course, students required to meet a minimum of 136 hours in one semester, which consist of 40 hours for lecture 48 hours for structured assignments 48 hours for private study
Credit points	3 SKS = 4.5 ECTS
Required and recommended prerequisites for joining the module	No prerequisites required
Module objectives/intended learning outcomes	<ol style="list-style-type: none"> 1. Be able to implement the Mathematical theory that has been learned into an algoritma. 2. Mastering syntax and semantics in Python to be able to implement programs. 3. Able to read and understand an existing algorithm and be able to implement it into the program. 4. Be able to design algorithms for simple real-world problems.



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Content	<p>Students will learn about:</p> <ol style="list-style-type: none"> 1. Python Environment 2. Syntax 3. Function 4. Programmer Toolbox 5. Operator 6. Conditional Execution 7. Loop Control 8. Data Type <p>File Input/Output</p>
Examination forms	<p>Assessment of the learning process according to the following components: Assignments 20%, Project 1 (UTS) 40%, and Project 2 (UAS) 40%</p>
Study and examination requirements	<p>Study and examination requirements:</p> <ul style="list-style-type: none"> • Students must be present 15 minutes before the lecture begins. • Students must turn off all electronic devices. • Students are required to notify the lecturer if they are absent from class due to illness, etc. • Students must turn in all classwork before the deadline. • Students must take an exam to get a final grade. • Attend face-to-face lectures at least 80% of the ideal number of meetings • Every student must be active and participatory in lectures <p>Form of examination: UTS: Ujian Praktek Coding UAS: Project</p>
Reading list	<p>Main Reference</p> <ol style="list-style-type: none"> 1. Hahn, Brian H. Valentine, Daniel T. Essential Python Fifth Edition. Elsevier. 2. Python Documentation on Python Programming Language <p>Supporting reference</p> <ol style="list-style-type: none"> 1. Introduction to Programming with Python, Coursera Course, https://www.coursera.org/learn/Python