

Republic of the Philippines Department of Education

BEPARTMENT OF EDUCATION REGISSOR SECTION SECTION SECTION SECTION SECTION OF THE SECTION SECTIO

REGION I

REGIONAL	MEMOR	ANDUM
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No. 899 , s. 2025

CALL FOR NOMINATIONS FOR THE SEAMEO REGIONAL CENTRE FOR QITEP IN SCIENCE (SEAQIS) REGULAR COURSES

To: Schools Division Superintendents

1. The Southeast Asian Ministers of Education Organization Regional Centre for Quality Improvement of Teachers and Education Personnel in Science (SEAQiS) announces its **Call for Nominations** for its regular courses, with details as follows:

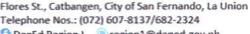
Regular Course	No. of Slots	Target Participants	Schedule	Deadline
Environmental Education for Sustainable Development (ESSD)	One (1)	Junior and Senior High School Science Teachers	03-09 August 2025	
Earth and Space Science (ESS)	One (1)	Junior and Senior High	Face-to-Face (Bandung,	11 July 2025
Science Classroom Supervision (SCS)	One (1)	School Physics/ Geography Teachers	Indonesia)	

- 2. All nominees must meet the qualifications and submit the documentary requirements listed in **Enclosure 1**. The Scholarship Clearance **(Enclosure 2)** should also be submitted.
- 3. The required documents must be accomplished and uploaded (in PDF form) on or before the set deadline, through the Microsoft Office Form which can be accessed through the link https://forms.office.com/r/NgMnNefYYU. Kindly use official DepEd email accounts in submitting the requirements.
- 4. Please note that the applications may be disqualified due to various reasons, such as but not limited to incomplete requirements, lack of official endorsement/s. direct sending of requirements to the Secretariat's email, discrepancies in documents, etc.
- 5. The SEAQiS shall provide full scholarships to the successful candidates, covering their accommodation, meals, course materials, and reimbursement of economy fare (to and from Yogyakarta, Indonesia).











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- 6. The participants are advised to bring their own laptops, casual attire for daily physical activities, and any necessary medication/s for the whole duration of the course in Indonesia.
- 7. Enclosed is the Concept Note on the SEAQiS Regular Courses, for reference.
- 8. For additional information or concerns, please contact the NEAP Scholarship Secretariat through email scholarship@deped.gov.ph and/or landline (02) 8715-9919.

9. For immediate dissemination and appropriate action.

TOLENTINO G. AQUINO

Director IV

Encl: As stated

Reference: DM-OUHROD-2025-1860

To be indicated in the Perpetual Index

Under the following subjects:

SCIENCE

PROGRAMS

SCHOLARSHIPS

 $\begin{array}{l} {\rm HRDD/njcclc/RM_SEAMEOSEAQiS2025} \\ {\rm July~10,~2025} \end{array}$











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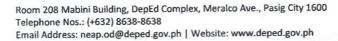
GENERAL ELIGIBILITY REQUIREMENTS/CHECKLIST

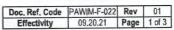
Name:	
Scholarship Program:	
Sponsoring Agency/Organization:	
Region/SDO:	
Work Station:	

Remarks (•, X, others)	Eligibility	Documentary Requirements			
	a. Must be a Filipino citizen.	Updated Personal Data Sheet			
	b. Must have obtained a very satisfactory (VS) performance rating for two (2) consecutive years.	Latest rated performance rating with approved IDP			
	c. Must present his/her Individual Development Plan (IDP) that is validated by the head of the office.				
	d. Must be holding a permanent item.	Updated Service Record			
8 .	f. Must have no master's degree (for those who will apply for a master's degree) and shall have no doctoral degree (for those who will apply for a doctoral degree).	Updated Personal Data Sheet			
	g. Must have no current or pending enrollment in other institutions for graduate or postgraduate degree programs (for degree programs).				
	h. Must be willing to sign a Scholarship Contract and commit to its provisions.	(shall be complied after being officially nominated)			
	j. Must have no pending administrative, civil, or criminal case, and must have not been found guilty of any violation involving moral turpitude, corruption, or fraud.	Certificate of no pending administrative/legal charges			













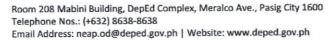
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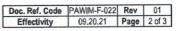
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SCHOLARSHIP CLEARANCE

I. NAME	i i		
II. Position/Designation			
III. Permanent Station			
IV. Has availed any scholarship program	□ Yes		If yes, fill out sections V-X, as applicable.
	Program Type	Tit	le of the Program
V. Scholarship Program	□ Degree		
	□ Non-Degree		
VI. Scholarship Duration			
VII. Status			
d	Completed the course		Withdrawn from the
	(Submit a copy of Certificate of Completion)		ate the reason below)
VIII. Reason/s for Non- Completion	□ Resignation □ Tran	nsfe	r - Retirement - Others
(must be supported by attachments)	Explain further.		









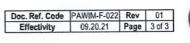


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IX. Service Obligation	No. of Months/Yrs Required	No. of Months/Yrs Completed		
X. Reason for Non-Completion (must be supported by attachments)				
I hereby attest that th documents attached here		is form and the supporting		
Name and Signature of the	Scholar	Date and Time		
This is to certify that the i		n and the supporting documents		
Name and Signature of t Authority (SDC	Date and Time			
APPROVED				
Name and Signature of the Recommending Authority Date and Time (RO-HRDD)				







Concept Note

Training Course on Science Classroom Supervision 2025

A. Rationale

One of the core competencies that school principals and supervisors must possess is academic supervision. Through academic supervision activities, principals or supervisors are expected to provide services, guidance, and support to enhance teachers' competencies, such as instructional and classroom management. Well-planned and well-prepared supervision can help teachers develop their professionalism and improve the effectiveness of the learning process in the classroom. Moreover, effective school principals are key to large-scale and sustainable educational reform. For quite some time, educators have believed that school principals must act as instructional leaders to be effective leaders in driving sustainable innovation (Fullan, 2002).

Instructional leadership is an educational leadership approach that emphasizes the role of school principals in promoting and supporting effective teaching and learning practices within their institutions. This concept centers on the idea that school leaders play a critical role in shaping and improving the quality of instruction and student learning outcomes. Fullan (2002) explains that a principal's leadership in learning is an essential component of improving student learning quality. Furthermore, Fullan (2002) states that to ensure deeper learning, foster problem-solving and thinking skills, and develop highly motivated and engaged learners, the energy and capacity of teachers must be mobilized. In turn, to mobilize teachers, their working conditions must be improved. Therefore, leaders who can create fundamental transformation in the school's learning culture are crucial.

Based on this new direction in academic supervision practices—particularly

within the framework of instructional leadership as outlined above—SEAQIS will organize a Training on Science Classroom Supervision: Instructional Leadership for School Principals and Supervisors. This training is expected to enhance the competencies of school principals and supervisors in carrying out instructional leadership in their respective schools. Through this training, they will gain new insights to improve both teacher performance and overall school performance.

B. Objectives

1. General Objective

The general objective of the Training Course on Science Classroom Supervision is to enhance the competencies of school principals and instructional leaders in implementing instructional leadership within their respective schools.

2. Specific Objectives

The specific objectives of the Training Course on Science Classroom Supervision are for participants to be able to:

- Explain current trends and global issues in science education;
- Describe the nature of science and its implementation in science teaching and learning;
- 3. Explain STEM learning as an approach in science education;
- 4. Describe the new paradigm of educational supervision practices;
- Explain the essential concepts of instructional leadership to improve the quality of science teaching and learning; and
- Develop a science classroom supervision program based on instructional leadership concepts to enhance the quality of science education.

C. Participants and Facilitators

- The target participants of this training are science teachers at the junior high school level and physics or geography teachers at the senior high school level. Participants must come from one of the SEAMEO member countries. The total number of participants is 30, consisting of 20 individuals from Indonesia and 10 representatives from other SEAMEO member countries.
- The facilitators for this training include experts from SEAMEO QITEP in Science, as

well as distinguished academics from leading Indonesian institutions.

D. Date and Training Mode

The training course will be conducted from 03–09 August 2025. The venue of the programme is in Bandung, Indonesia.

E. Course Subjects

Programme Structure

Training Course on Science Classroom Supervision 2025

No.	Course Subject	Lesson Hours
1	Trends and Issues on Global Science Education	2
2	SEAQIS Program	1
3	Country report on instructional leadership	8
4	Nature of Science and its implementation in science learning.	8
5	STEM Learning	8
6	Science Classroom Supervision	8
7	Instructional leadership	13
8	Evaluation	1
9	Follow-up action	1,
	Total	50

F. Scope of Subject

No	Course subject	Lesson hours	Learning Objective	Scope of Contents
1	Trends and Issues on Global Science Education	2	To explain trends and issues in global science education	Revolution industry 21st Century Skills Trend and Issues in Science Education The characteristics of Generation Z
2	SEAQIS Programme	1	To understand SEAQIS Program	SEAQIS Programme
3	Country Report on Instructional Leadership	8	To disseminate the implementation of science classroom supervision instructional leadership in school	Country Report on Supervision/Instructional Leadership
4	Nature of Science and its implementation in science learning.	8	To explain the nature of science and its implementation in science learning	Nature of science Implementation science learning
5	STEM Learning	8	To explain STEM learning as an approach in science education.	Characteristics of STEM learning Implementation of STEM learning in classroom
6	Science Classroom Supervision	8	To explain the new paradigm of educational supervision practices.	New paradigm of supervision Implementation of Science classroom supervision

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No	Course subject	Lesson hours	Learning Objective	Scope of Contents
7	Instructional leadership	13	To explain the essential concepts of instructional leadership to enhance the quality of science teaching and learning. Develop a science learning supervision program based on instructional leadership concepts to improve the quality of science learning.	Instructional leadership principals Strategy to implement instructional leadership
8	Evaluation	1	To evaluate the implementation of training course	Evaluation
9	Follow-up action	1	To plan the follow-up	Follow up action

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Concept Note

Training Course on Environmental Education for Sustainable Development 2025

A. Rationale

The increasingly complex and multidimensional global environmental crisis positions the education sector as a key element in preparing a resilient and responsible generation for the future of our planet. Today, environmental challenges go beyond climate change; they also encompass biodiversity loss, the clean water crisis, plastic pollution, and unequal access to natural resources. These phenomena demand a more holistic and transformative approach to education, particularly through Environmental Education for Sustainable Development (EESD), which emphasizes the integration of science, technology, and sustainability values.

The United Nations Climate Change Conference (COP28), held at the end of 2023, reinforced the importance of the Loss and Damage Fund, Just Energy Transition, and Nature-Based Solutions for climate adaptation. Within this context, science education plays a strategic role as a medium to strengthen ecological awareness, foster local innovation, and cultivate students' systems thinking abilities. Curricula must be oriented not only toward the transmission of knowledge but also toward the development of contextual and applicable competencies in climate change mitigation and adaptation.

Aligned with the Sustainable Development Goals (SDGs), particularly Goal 13 (Climate Action) and Goal 4 (Quality Education), as well as the SEAMEO 7 Priority Areas, educational institutions play a crucial role in shaping environmentally conscious citizens who are critical of ecological injustice and ready to actively participate in social transformation toward sustainability.

Amid these challenges, SEAQIS, through the Southeast Asia Climate Education Programme (SEA-CEP), continues to strengthen the capacity of teachers and educators in integrating environmental education into science teaching. One concrete initiative is the implementation of the Training Course on Environmental Education for Sustainable Development (EESD) for primary, lower secondary, and upper secondary school teachers. This training is expected to serve as a space for shared dialogue and reflection, while also enhancing teachers' pedagogical competencies and scientific literacy in designing transformative, contextual, and future-oriented learning experiences.

B. Learning Objectives

The objectives of the Training Course on Environmental Education for Sustainable Development (EESD) are for participants to:

- Integrate the principles of Education for Sustainable Development (ESD) into teaching and learning processes, particularly within environmental contexts;
- Share best practices in environmental education activities related to the development of knowledge, skills, and values in support of sustainable development;
- Understand broader issues related to the environment and sustainable development, including historical and artistic perspectives, as well as climate education;
- 4. Enhance teachers' skills, understanding, and competencies to implement climateconscious science education;
- 5. Design contextual learning experiences related to climate change;
- Provide participants with a strong framework to develop relevant local education programs addressing climate change issues;
- Simulate learning practices or programs that will be implemented in their respective schools.

C. Participants and Facilitators

The target participants of this training are Science teachers and education personnel
 from junior and senior high schools which come from SEAMEO member countries

(Brunei Darussalam, Cambodia, Indonesia, Malaysia, Myanmar, Lao, Philippines, Singapore, Timor Leste, Thailand, Vietnam)

 The facilitators for this training include experts from SEAMEO QITEP in Science, as well as distinguished academics from leading Indonesian institutions.

D. Time and Place

The training course will be conducted from 03–09 August 2025. The venue of the programme is in Bandung, Indonesia.

E. Course Programme

Programme Structure Training on Environmental Education for Sustainable Development 2025

No.	Course Subject		Hours		
INU.			Practice		
1	Education Policy for Climate Change	2	-		
2	Trend and issues on Global Science Education	2	-		
3	Sustainable Development: Historical perspective and state of the art	3	-		
4	Climate Change: Issues, Mitigation, and Adaptation	3	4		
5	Environmental Education Profiles in Southeast Asia	2	6		
6	Introduction of E-STEM (Environmental STEM) in Classroom Practices	3	4		
7	Biodiversity and Ecosystem services	2	4		
8	Teaching on Climate Change and Biodiversity in Classroom	2	8		
9	Action Plan	-	2		
10	Training Orientation	1	-		
11	Pre/Post Test	-	2		
	Total	20	30		
	Total		50		

F. Scope of Subject

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
1	Education Policy for Climate Change	2	Understand current climate change trends and issues at global and Southeast Asia regional scale	 Policies, action, and efforts conducted by SEAMEO Member Countries to reach the global vision of sustainable development through environmental education. Environment current state and environmental education profiles in Southeast Asia (explained by participants from each country).
2	Trend and issues on Global Science Education	2	This session explores current and future trends in global science education, with a specific focus on the integration of Artificial	 Introduction to Artificial Intelligence (AI) in Education AI for Climate Change Solutions

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
			Intelligence (AI) to	
			address climate	
			change challenges.	
			Understand other	Basic concept of
			issues related to	Sustainable
			environment and	Development
	_		sustainable	(SD), the
			development such	environmental,
			as historical	social and
			perspective and	economic
			state of the art of	dimensions.
			sustainable	Basic concept of
			development,	Sustainability
	- × ×		greenhouse effect	Science.
	Sustainable		and science behind	 Major ecological
3	Development:	3	the climate change,	concepts, the
	Historical perspective		climate change and	environmental
	and state of the art		biodiversity and	problems that
			how to implement	affect the world in
			climate change	which we live and
			education.	methodologies
				that will help us
				manage the
			27	Earth's resources
				today and into the
				future.
				• Development of
				sustainability
	-			concept and

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
				sustainability science in recent years. Implementation of sustainability concept in real practice. Case study in Indonesia.
4	Climate Change: Issues, Mitigation, and Adaptation	7	To acquaint master teachers to global and local issues of climate change using Inquiry-based Science Education (IBSE) as an approach to teaching climate change.	 Examination of the Greenhouse Effect Climate System dynamics Intricacies of Climate Change phenomena.
5	Environmental Education Profiles in Southeast Asia	8	Share best practices in environmental education activities related to knowledge development, skills, and values as well as their	Sharing implementation of environmental education concept in real practice.

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
			support to sustainable	
			development;	
6	Introduction of E-STEM (Environmental STEM) in Classroom Practices	7	Acquaint participants to global and local issues related to climate change through STEM Education and Computational Thinking as an approach to teaching climate change.	The scope of content involves introducing E-STEM (Environmental STEM) into classroom practices, including exploring its principles, methodologies, and applications within the educational context and Climate Change. Terms of Science Process Skills, introduction of STEM Education and Learning Assessment, and its connection with EESD.

No.	Course Subject	Lesson Hours	Learning Objective		Scope of content
				•	
7	Biodiversity and Ecosystem services	6	Analize and understanding the importance of biodiversity and ecosystem services.		The importance of ecosystem functions in life, the influence of biodiversity on ecosystem and how to maintain it. Exposure to the biodiversity of REEPS (Rare, Endangered, Endemic, & Protected Species) in Southeast Asia region. Management that involves putting natural resources to their best use for human purposes in addition to preserving the
8	Teaching on Climate	10	Enhance teachers'	•	natural system. Science
ō	Change and	10	skills,		curriculum

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
	Biodiversity in		understanding, and	analysis and
	Classroom		competencies to	facilitation
			assist in	method design for
			implementing	an effective
			climate change-	implementation of
			informed science	the environmental
			learning.	education to
				support
				sustainable
				development in
				the classroom.
				Learning Scenario
				on Environmental
				Education in
				Classroom
				Assessment
				Method on
				Environmental
				Education in
				Classroom
				Designing
				Learning Scenario
				and Assessment
				of EESD in
				Classroom
			Action plan adalah	Action plan
			rencana tertulis	Action plan worksheet
9	Action Plan	2	yang akan	MOLVOLIGEE
			dilaksanakan	

•

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
			peserta untuk	
			mencapai tujuan	
	3		tertentu sesuia	
			dengan	
			pembelajaran dan	
			materi pelatihan	
	*		yang telah	
			diberikan oleh	
			center	
			Training	Activity guidelines
			Orientation is the	
			initial session	
			designed to provide	
			participants with a	
			comprehensive	
			overview of the	
			mencapai tujuan tertentu sesuia dengan pembelajaran dan materi pelatihan yang telah diberikan oleh center Training Orientation is the initial session designed to provide participants with a comprehensive	
			from the first day to	5
10	Training Orientation	1	the last. In this	Activity guidelines
10	Training Officiation		session,	
			participants will be	
			introduced to the	
			flow of activities,	
			core learning	
			materials,	
			instructional	
			approaches to be	
			used, as well as the	
			types of activities	

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
			they will engage in	
			throughout the	
			training program.	
11	Pre/Post Test	2	-	-
	Cultural Exchanges		to foster cross-	The participants from
	and Sharing among		cultural	all SEAMEO Member
	SEAMEO Countries		understanding,	Countries will be
	Participants		collaboration, and	participating in
			knowledge-sharing	showing their national
			among participants	culture. The cultural
			from SEAMEO	exchange serves as a
			member countries.	platform for
				participants from
				different countries to
				interact with each
12		5		other, learn about
				other cultures and
				customs. In past
				years, the
				participants have
			=	performed traditional
	a.			dance, recited poetry,
				played musical
				instruments, and
				sang national songs
				from their respective
				countries.



Concept Note

Training Course on Earth and Space Science 2025

A. Rationale

Earth and Space Science (ESS) is a branch of science that studies the Earth and its neighbors in space. ESS encompasses various disciplines such as geology, meteorology, oceanography, and astronomy (King, 2025). This field helps us understand the structure, processes, and history of Earth as well as its interactions with the outer space environment. By studying ESS, we can uncover the mysteries of the universe and comprehend how different elements on Earth and in space interact to shape the environment we inhabit.

Moreover, we are currently facing various disasters—both those caused by nature (natural disasters) and those triggered by human activities (man-made disasters)—ranging from earthquakes, volcanic eruptions, and tsunamis to climate change. A solid understanding of Earth and space sciences can enhance our awareness of how these disasters occur, as well as foster disaster risk reduction awareness and understanding.

ESS helps us comprehend the natural processes that shape our environment, such as the water cycle, climate change, and geological activity (Deel, 2024). Knowledge of ESS allows us to predict and mitigate the impact of natural disasters like earthquakes, volcanic eruptions, and storms (King, 2025). Additionally, research in ESS drives technological innovations that can be applied in various sectors, including health, agriculture, and communication (Deel, 2024). ESS is also essential for space exploration, helping us understand other planets and the potential for life beyond Earth (King, 2025). Thus, ESS not only provides insights into our own planet but also opens opportunities for discoveries in outer space.

ESS learning is conducted through an interdisciplinary approach that integrates various scientific fields such as physics, chemistry, biology, and mathematics (Cowen, 2024). Active learning methods such as hands-on experiments, computer simulations, and field observations offer in-depth learning experiences (Cowen, 2024). Furthermore, advanced technologies like satellites, telescopes, and sensors are used to collect and analyze environmental data (Cowen, 2024). Through this approach, students not only learn theoretical concepts but also acquire practical skills applicable to real-world situations. One pressing issue related to ESS is global climate change and its impact on ecosystems and human life (Pultarova, 2025). Climate change has become one of the greatest challenges faced by humanity, and a deep understanding of ESS can help us develop strategies to address its effects.

In response to these challenges, SEAQIS as a center focused on enhancing the quality of science education, has been promoting Earth and Space Science Education since 2009. This effort is carried out through collaboration with various institutions. By organizing Earth and Space Science training, teachers are expected to enhance their knowledge and skills in managing classroom activities related to Earth and space science.

This training, known as the "Training Course on Earth and Space Science," is a regular in-person training program organized by SEAQIS. It covers the fundamentals of Earth science, atmospheric science, space science, disaster risk reduction, and how to implement them in classroom learning. The training is attended by science teachers, particularly those specializing in physics and geography, from SEAMEO member countries. Therefore, this training aims to improve the quality of science education and prepare teachers to face the challenges of teaching Earth and space science to their students.

B. Learning Objectives

The Training Course on Earth and Space Science aims to enable participants to:

 Enhance Content Knowledge: To deepen teachers' understanding of fundamental concepts in Earth and Space Science;

- Develop Pedagogical Skills: To improve teachers' ability to design and implement effective classroom activities related to Earth and Space Science;
- Integrate ESD Principles: To incorporate the principles of Education for Sustainable Development (ESD) into Earth and Space Science teaching, and to promote a holistic approach to sustainability;
- Foster Critical Thinking: To cultivate critical thinking and problem-solving skills among teachers so they can address complex scientific and environmental issues;
- 5. Promote Collaborative Learning: To provide opportunities for teachers to share best practices and collaborate with peers from various SEAMEO member countries;
- Align with Global Goals: To ensure the training aligns with and supports the United Nations Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education).

C. Participants and Facilitators

- The target participants of this training are science teachers at the junior high school level and physics or geography teachers at the senior high school level. Participants must come from one of the SEAMEO member countries. The total number of participants is 30, consisting of 20 individuals from Indonesia and 10 representatives from other SEAMEO member countries.
- The facilitators for this training include experts from SEAMEO QITEP in Science, as well as distinguished academics from leading Indonesian institutions.

D. Time and Place

The training course will be conducted from 03–09 August 2025. The venue of the programme is in Bandung, Indonesia.

E. Course Programme

Programme Structure

Training on Earth and Space Science 2025

	Course Subject	Hours		
No.	Course Subject	Theory	Practice	
1	Trend and issues on global Science Education related to earth and space learning	2	-	
2	Earth Science: Solid Earth and Theory of Plate Tectonics	3	-	
3	Meteorology: Climate Issues	3	-	
4	Space Science: Our Solar System	3	-	
5	Disaster Risk Reduction and Mitigation	3	2	
6	Digital learning media in earth and space topic	2	3	
7	Implementation Earth and Space Science in Classroom Activity	1	5	
8	Observation of Earth and space phenomenon	-	6	
9	Earth and Space Science Education Profile in Southeast Asia	-	5	
10	Developing Earth and Space Science Lesson Plan and Resources	-	6	
11	Cultural Exchanges and Sharing among SEAMEO Countries Participants	-	4	
12	Action Plan	-	1	
13	Evaluation	-	1	
	Total	17	33	
	Iotat		50	

F. Scope of Subject

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
1	Trend and issues on global Science Education related to earth and space learning	2	Enhance teachers' awareness and understanding of current trends and issues in global science education.	 Overview of the latest developments in science education globally. Addressing climate change and environmental education in the science curriculum. Exploration of innovative teaching methodologies such as inquiry-based learning, project-based learning, and STEM education.
2	Earth Science: Solid Earth and Theory of Plate Tectonics	3	Gain an understanding of Earth's structure and plate tectonics, and apply this knowledge in educational settings.	 Overview of Earth's internal structure and composition. In-depth study of the theory of plate tectonics and its geological implications. Classroom activities to illustrate concepts related to solid Earth and plate tectonics.
3	Meteorology: Climate Issues	3	Understand the science of meteorology and climate change, and develop strategies to teach these concepts.	 Basics of meteorology and weather patterns. Educational strategies to teach students about climate issues and environmental

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
4	Space Science: Our Solar System	3	Acquire detailed knowledge about the solar system and develop effective teaching activities.	 Detailed study of the solar system's components: planets, moons, asteroids, comets, etc. Understanding celestial phenomena and their impacts on Earth. Development of engaging classroom activities and experiments related to the solar system.
5	Disaster Risk Reduction and Mitigation	5	Learn about disaster risk reduction and mitigation, and how to integrate these concepts into education.	1. Understanding natural disasters and their impact on communities. 2. Role of Earth observation and spacebased technologies in disaster management. 3. Educational strategies for teaching disaster preparedness and risk reduction.
6	Digital learning media in earth and space topic	5	Utilize digital tools and media to enhance the teaching and learning of Earth and space science.	1. Overview of digital learning tools and resources. 2. Integrating multimedia and interactive content into Earth and space science lessons. 3. Hands-on practice with digital platforms and educational technologies.
7	Implementation Earth and Space Science in	6	Develop practical skills to implement Earth and space science concepts in	Hands-on practice with Earth and Space Science Activity Designing and conducting inquiry-based and hands-on activities.

•

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
	Classroom		classroom	
	Activity		activities.	-
8	Observation of Earth and space phenomenon	6	Enhance practical knowledge and observational skills through field trips and hands-on activities.	 Field trip to the Geology Museum: Exploring geological specimens, understanding Earth's history, and learning about mineral resources. Field trip to the Bosscha Observatory: Observing celestial objects, understanding the functioning of telescopes, and gaining practical astronomy experience.
9	Earth and Space Science Education Profile in Southeast Asia	5	Sharing among participants related to learning innovation and experience in classroom.	participants report and sharing implementation related to Earth and Space Science, disaster risk reduction or sustainable development goals in classroom
10	Developing Earth and Space Science Lesson Plan and Resources	6	Create lesson plans and teaching resources for Earth and space science education.	 Step-by-step guide to developing lesson plans. Resources and materials for teaching Earth and space science. Peer review and feedback on developed lesson plans.
11	Cultural Exchanges and Sharing among	4	to foster cross- cultural understanding,	The participants from all SEAMEO Member Countries will be

No.	Course Subject	Lesson Hours	Learning Objective	Scope of content
	SEAMEO		collaboration, and	participating in showing
	Countries		knowledge-sharing	their national culture. The
	Participants		among participants	cultural exchange serves
			from SEAMEO	as a platform for
			member countries.	participants from different
				countries to interact with
				each other, learn about
				other cultures and
				customs. In past years, the
				participants performed
				traditional dance, recited
				poetry, played musical
				instrument, sang national
				song from their respective
				countries.
40	Action Disc	4	To plan the follow-	Follow up action plan
12	Action Plan	1	up action	
	100		To evaluate the	Pre and post-test and
13	Evaluation	1	implementation of	program evaluation
			training course	