

Republic of the Philippines

DEPARTMENT OF EDUCATION

Region VII, Central Visayas

SCHOOLS DIVISION OF NEGROS ORIENTAL Office of the Curriculum and Implementation Division

Capitol Area, Dumaguete City



www.depednegor.net 🔀 negros.oriental@deped.gov.ph 📞 (035) 225 1622



March 7, 2018

DIVISION MEMORANDUM

No. 144; s. 2018

REGULAR COURSE (BATCH 1 & 2) OFFERED BY SEAMEO RECSAM FOR FISCAL YEAR 2018-2019 (2-27 JULY 2018) AND FISCAL YEAR 2018-2019 (1-26 APRIL 2019)

TO: **Assistant Schools Division Superintendent**

Division Chiefs

Education Program Supervisors/Division Coordinators

Public Schools District Supervisors/Districts-In-Charge

Public Secondary School Heads

All Others Concerned

- 1. This office informs the field about the Regional Memorandum No. 139 and No. 142 s. 2018 re: Regular Course (Batch 1 and 2) offered by SEAMEO RECSAM for fiscal year 2018-2019.
- 2. Interested aspirants must submit the required forms on or before March 20, 2018 for batch 1, and on or before November 5, 2018 for batch 2.
- 3. For particulars, please refer to the attached DepEd Memorandum No. 034 and No.035 s. 2018 from Dr. Lorna Dig Dino, Undersecretary, Curriculum and Instruction.
- 4. For your information and widest dissemination.

🥍: SALUSTIANOT. JIMENEZ, CESO VI.

OIC, Office of the Assistant Regional Director Concurrent Schools Division Superintendent

£ 7 MAR 2018





REPUBLIKA NG PILIPINAS REPUBLIC OF THE PHILIPPINES

KAGAWARAN NG EDUKASYON DEPARTMENT OF EDUCATION REHIYON VII, GITNANG VISAYAS REGION VII, CENTRAL VISAYAS

Sudlon, Lahug, Cebu City



FEB 1 9 2018

REGIONAL MEMORANDUM

No. 0 1 39 , s. 2018

REGULAR COURSE (BATCH 1) OFFERED BY SEAMEO RECSAM FOR FISCAL YEAR 2018-2019 (2-27 JULY 2018)

To : Schools Division Superintendents/OICs

- 1. Enclosed is a memorandum from Dr. Lorna Dig Dino, Undersecretary, Curriculum and Instruction, re Regular Course (Batch 1) Offered by SEAMEO RECSAM for Fiscal Year 2018-2019 (2-27 July 2018), for your appropriate action.
- 2. For particulars, refer to the attached communication.
- 3. For inquiries and clarifications you may contact the DepEd Scholarship Secretariat at (02) 633-9455 or by email at neap.pdd@deped.gov.ph.
- 4 Wide dissemination of this memorandum is desired.

JULIET A. JERUTA

Director III

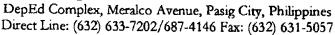
Officer-In-Charge

JAJ/STJ/mgb



Republic of the Philippines

Department of Education





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Undersecretary for Curriculum and Instruction

MEMORANDUM DM-CI-2018-00/24

Scholarship Advisory No. 03, s. 2018

TO

Regional Directors

Schools Division Superintendents

Heads of Public Elementary and Secondary Schools

FROM

Jame & W

LORNA DIG DINO, Ph.D.

Undersecretary for Curriculum and Instruction

SUBJECT

Regular Course (BATCH 1) Offered by SEAMEO RECSAM for

Fiscal Year 2018-2019 (2-27 July 2018)

DATE

29 January 2018

The SEAMEO RECSAM announces its regular courses for Senior Educators and teacher trainers of SEAMEO member countries for Fiscal Year 2018-2019 (2-27 July 2018):

Course Code	Course Title	Deadline of Submission of Requirements	Number of Scholarships Available
RC-SS-143-1	Fostering Higher Order Thinking Skills in Secondary Education	23 March 2018	Two (2) slots
RC-PM-143-2	Enhancing Primary Mathematics Teaching and Learning through Professional Learning Community	23 March 2018	Two (2) slots

Member countries are welcome to send fee-paying participants for the above courses (see item 5.0 for conditions). Application for places could be made earlier through telephone call or e-mail at <u>director@recsam.edu.my</u>. An official letter may be sent to Director, SEAMEO RECSAM, Jalan Sultan Azlan Shah, 11700 Gelugor, Penang, Malaysia.

The qualifications required for the course participants are described in Annex B (Regular Courses for Fiscal Year 2018-2019 (Batch 1), 2-17 July 2018.

The nominated participants must:

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- Be in good health both physically and mentally and certified medically fit in order to complete the course (Applicants must submit his/her medical certificate together with the application form);
- 2. Be considered as a nominee only upon receipt of the duly completed application form of the nominees;
- 3. Submit a photocopy of the front page of their passport with their particulars clearly printed; and
- 4. Complete the application forms in duplicate copies. Completed application forms, scholar agreement, medical report, photocopy of international passport and other relevant documents of the nominated candidates must be sent to RECSAM before the deadline given.

All other required documents must be submitted via email at <u>neap.pdd@deped.gov.ph</u> on or before the stated deadline.

The application form and other details of the program are enclosed in this memorandum. For further inquiries and clarifications, you may contact the DepEd Scholarship Secretariat at (02) 633-9455 or thru email at neap.pdd@deped.gov.ph.

Immediate dissemination of and appropriate action for this memorandum is desired.

Annex A: List of Requirements

B: Course description for fiscal year 2018/2019 (Batch 1)

C: Application Form

D: Medical Report Form

E: Scholar Agreement

F: Checklist for the documents to be submitted to SEAMEO RECSAM

G: Scholarship Contract

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F: Checklist for the documents to be submitted to SEAMEO RECSAM

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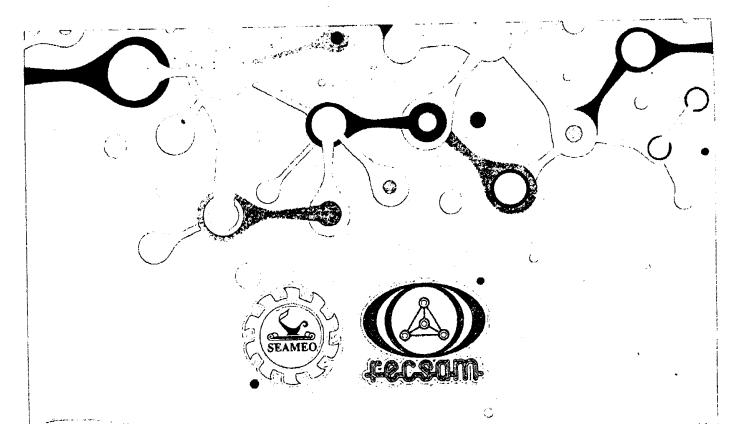
LIST OF REQUIREMENTS

A. Qualifications

- a. Filipino citizen
- b. Must have rendered at least two (2) years of service in the government (DepEd) at the time of nomination
- c. Must hold a permanent appointment at the organization nominating him/her
- Must have obtained at least a Very Satisfactory performance rating for two (2) consecutive period preceding the nomination
- e. Must have no pending administrative and/or criminal case
- f. Must have a college degree and/or sufficient demonstrated ability and experience related/relevant to the course applied for
- g. Must have no pending nomination for scholarship in another program/course
- h. Must have already rendered the required service obligation for a scholarship previously enjoyed
- Must meet the position level, age, education and experience required and specified by the donor country/organization/course
- j. Must have a good command of the English language (spoken and written)
- k. Physically and medically fit to travel
- 1. Must have above average ICT skills
- m. Not an expectant mother

B. Documentary

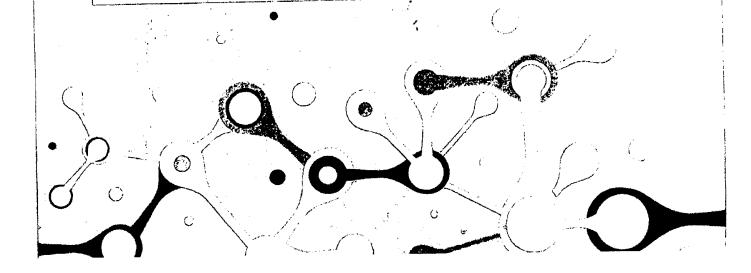
- a. Endorsement from RO and SDO
- b. Detailed and updated Curriculum Vitae
- c. Letter of Application addressed to the donor organization
- d. Nomination Letter from the Regional Director or his/her duly authorized representative (thru the Regional HRDD Chiefs)
- e. Statement of present actual duties and responsibilities relevant to the course/program, signed by the immediate supervisor
- f. Personal Data Sheet
- g. Service record
- h. Performance rating for two (2) consecutive rating periods immediately preceding the nomination
- Medical certificate of physical fitness issued by a physician from a recognized accredited health institution but not the same institution where the applicant is presently employed
- Certification that the applicant has no pending application for scholarship under another program signed by the immediate supervisor
- k. Certification of no pending administrative and/or criminal case signed by the applicant's respective legal / administrative officer
- 1. Photocopy of Valid Passport (2 copies)
- m. Signed Scholarship Contract



FOR FISCAL YEAR 2018/2019 (BATCH 1)

2-27 JULY 2018

COURSE DESCRIPTION



REGULAR COURSES FOR FISCAL YEAR 2018/2019

Course Code: RC-SS-143-1

Course Title: FOSTERING HIGHER ORDER THINKING SKILLS IN SECONDARY SCIENCE

EDUCATION

Rationale:

Recently there have been widespread discussions on the need for the teaching of higher order thinking skills (HOTS) to prepare students to be the creative and innovative workforce. No longer is it enough for high school graduates simply to know basic facts and skills. To be successful, students must master decision-making, prioritising, strategising and collaborative problem solving. Moreover, higher order thinking allows students to excel and achieve intellectual freedom (Limbach & Waugh, 2010).

Although we often assume that thinking skills develop automatically as students go through their schooling years, higher order thinking, specifically, needed to be taught, either implicitly or explicitly. In order to help students develop HOTS, teachers need to purposely and persistently practice strategies that promote higher order thinking such as bringing real-world problems into the classrooms, encouraging open-ended class discussions, and to carry out inquiry-oriented experiments (Miri, David, & Uri, 2007)

This course will introduce the participants to the what, why and how of higher order thinking as well as useful teaching and learning approaches, strategies and thinking tools that foster HOTS among the students.

Objectives:

The main objective of this course is to provide participants with the knowledge and skills required to foster higher order thinking among their students. At the end of the course, participants should be able to:

- 1. understand the definition and learning theories related to HOTS:
- acquire the necessary skills to develop HOTS through contemporary teaching and learning approaches such as Inquiry-based Science Education (IBSE) and Socio-Scientific Issues-based Education;
- utilise questioning techniques and metacognition to promote higher order thinking in science classrooms;
- 4. incorporate ICT and thinking tools to cultivate creative, critical and inquiry thinking skills; and
- develop higher order thinking assessment tools.

Course Contents:

This course is activity-oriented and participants will engage actively in initiating activities that facilitate discussions, sharing of experiences, planning and developing science lessons incorporating HOTS.

The major areas include:

- 1 Science Education
 - 1.1 Trends and Issues in Secondary Science Education
 - 1.2 Science Process Skills as Fundamentals to HOTS
 - 1.3 Definition and Learning Theories related to HOTS

- 2 Teaching and Learning Approaches to Foster Higher Order Thinking
 - 2.1 IBSE
 - 2.2 Socio-scientific (ssues-based Education
 - 2.3 Outdoor Science Learning
- 3 Strategies to Foster Higher Order Thinking
 - 3.1 Questioning Techniques for Higher Order Thinking
 - 3.2 Metacognition
 - 3.3 Integration of ICT
 - 3.4 Classroom Discourse, e.g. Reasoning, Argumentation, Debate
 - 3.5 Thinking Tools, e.g. Thinking Maps, Concept Cartoons, Graphic Organisers
- 4 Assessing Higher Order Thinking
 - 4.1 Assessing Higher Order Thinking in the Classroom
 - 4.2 International Assessments: Analysis of TIMSS and PISA Items
 - 4.3 Higher Order Thinking Items Construction
- 5 Theory into Practice
 - 5.1 Planning, Designing, Implementing and Improving Lessons Plans and Strategies with Emphasis on Developing HOTS Using the Lesson Quality Improvement Processes.

Duration: Four Weeks

Participants: Science Educators or Key Secondary Science Teachers

English Proficiency: Minimum IELTS Band of 4.5 or Equivalent

Expected Output:

1. Group Project Work Report

2. Individual Multiplier Effect Action Plan

References:

Limbach, B. & Waugh, W. (2010). Developing Higher Level Thinking. *Journal of Instructional Pedagogies Journal* (3). Academic & Business Research Institute.

Miri, B., David, B-C. & Uri, Z. (2007). Purposely Teaching for the Promotion of Higher-order Thinking Skills: A Case of Critical Thinking. Research in Science Education: 37(4): pp 353-369. Retrieved from http://link.springer.com/article/10.1007/s11165-006-9029-2

Course Code: RC-PM-143-2

Course Title: ENHANCING PRIMARY MATHEMATICS TEACHING AND LEARNING THROUGH PROFESSIONAL LEARNING COMMUNITY

Rationale:

Teachers are continuing seeking ways, albeit systematically, to improve classroom teaching and learning. To facilitate learning, teachers prepare lessons, develop instructional materials, evaluate student work, and share outcome with students with the intention of improving learning. This may sound like daily classroom teaching routines. But, if those activities are seen in a different perspective, that describes teachers designing and implementing a plan of action, observing and analysing outcomes, and modifying plans to better meet the needs of students, then the description is robust enough to be seen as a classroom research (Anderson, 2004). These activities will yield the ultimate goal of improving the quality of teaching and enhance better learning. As such, it is certainly appropriate to regard teachers as researchers. In fact, meaningful teacher research should be an intentional and systematic inquiry in order to improve classroom practice, and accordingly the outcome should also be a formal way of recording a good teaching in a written format.

However, it is equally important that all academic staff of a school work on the school's common purpose. Otherwise the various staff may be moving in different directions that could result in a lack of alignment of the scope and reducing the effect of collegial cohesion. Hence, all teachers at the school should come together to meet as one community, to share what the individual teachers or smaller units are learning, and to carry out the specific research learning that the whole school group deems important. This is the basic purpose of establishing Professional Learning Community (PLC) to upgrade the quality of teaching and thereby enhancing students' successful learning (Hord, Roussin & Sommers, 2010). Quality teaching is strengthened by continuing professional development of the teachers, and PLC sets the environment that facilitates collegiality and close collaboration among them

To promote the notion of teachers as researchers, and to increase the effectiveness of PLC, three classroom-based research methodologies, i.e. action research, case study and lesson study are recommended to be used by teachers to research on their own teaching. In the process of implementing any one or all of those methodologies, the teacher would have to choose a research question that he wants to focus on as provided by the whole school group, and then plan how to gather data for deriving useful information. Through data analysis, the teacher will then be able to reflect on what he has learned, and make conclusions or decisions on how to improve instructional practices to better serve student needs.

Objectives:

The main objectives of this course is to provide participants with the knowledge and skills required to conduct classroom-based research with the intention of establishing PLC in their own schools to enhance primary mathematics teaching and learning:

At the end of the course, participants should be able to:

- acquire basic knowledge and philosophy of classroom-based research, such as action research, case study and lesson study;
- develop basic research skills necessary to conduct classroom-based research in education to improve teaching and learning of primary mathematics;
- 3 attain simple statistical techniques for data analysis;

- 4 adopt alternative teaching methods/strategies derived from classroom-based research for enhancing effective teaching and learning of primary mathematics;
- 5 plan, design, implement, analyse and make conclusion collaboratively on a primary classroom-based research study; and
- 6 establish PLC in their own schools.

Course Contents:

This course emphasises a good grounding of theory in educational research and reflective classroom practices. Participants will have to engage actively in course activities and discussions, as well as fostering team work in designing and carrying out a small-scale classroom-based research study. The knowledge and skills acquired would enable them to initiate classroom-based research and form PLC for improving primary mathematics classroom practices in their respective schools upon returning to their own countries.

The major areas include:

- 1 Introduction to Educational Research
 - 1.1 Teachers as Researchers
 - 1.2 Nature and Elements of Educational Research
 - 1.3 Types of Research: Qualitative, Quantitative and Mixed-mode Research
- 2 Mathematics Education
 - 2.1 Issues and Trends in Primary Mathematics Education
 - 2.2 Selected Strategies/Approaches in Teaching and Learning of Primary Mathematics
 - 2.3 Formative Assessment
- 3 Classroom-based Research Methodologies
 - 3.1 Action Research
 - 3.2 Case Study
 - 3.3 Lesson Study
- 4 Theory into Practice: Implementation of a Small-scale Classroom-based Research
 - 4.1 Research Question
 - 4.2 Research Design
 - 4.3 Data Collection
 - 4.4 Data Analysis
 - 4.5 Interpretation, Conclusion and Report Writing
- 5 Simple Statistical Techniques
 - 5.1 Types of Descriptive Statistics
 - 5.2 Concepts Underlying Inferential Statistics
 - 5.3 Statistical Packages for Data Analysis
- 6 Professional Learning Community
 - 6.1 What, Why and How: Establishing PLC
 - 6.2 Sharing Personal Practice for Collective/Whole School Group Learning

Duration: Four Weeks

Participants: Mathematics Educators or Key Primary Mathematics Teachers

English Proficiency: Minimum IELTS Band of 4.5 or Equivalent

Expected Output: 1. Group Project Work Report

2. Individual Multiplier Effect Action Plan



SEAMEO REGIONAL CENTRE FOR EDUCATION IN SCIENCE AND MATHEMATICS Jalan Sultan Azlan Shah, 11700 Gelugor, Penang, Malaysia

COURSE CODE	

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APPLICATION FORM

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2) EXPERIENCE AND BACKGROUND

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11. Employment History (in chronological order)

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14. Overseas Conferences/Seminars attended

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IMPORTANT: THIS FORM SHOULD BE COMPLETED IN DUPLICATE. A COPY TO BE DISPATCHED THROUGH YOUR MINISTRY OF EDUCATION BY REGISTERED AIRMAIL TO REACH THE FOLLOWING ADDRESS

THE DIRECTOR SEAMEO RECSAM, 11700 GELUGOR, PENANG, MALAYSIA

It must be accompanied by a medical certificate that the intending participant is medically fit for the course.

MEDICAL REPORT (to be completed by an authorized physician)

Name of Applicant:								
Age:	Sex:	Height:	Weight:					
Blood Group:	<u> </u>							
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List any abnormalities indi	cated in the chest X-ray.	Pregnancy Test (for wom	an only)					
I certify that the applicant	is medically fit to underta	ke a course in SEAMEO RE	CSAM, Penang, Malaysia.					
Name of Physician:								
Address of Clinic:								
Telephone:								
Email:								
Signature of Physician:								



REF NO.

(FOR OFFICIAL USE ONLY)

SEAMEO RECSAM SCHOLAR AGREEMENT

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NOW TH	HIS DEED witnesseth as follo	ws:	
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(vii)	that he will not undertake a prior approval of the Direct		therwise, outside the course except with
(viii)	which he is required to und report the same to the Dire	dertake or perform as part of the Course actor and shall if so required by the Dire	or money's worth for any work or service or eny award gained during the Course, ctor surrender to the Director all or such etermine, retaining any remainder thereof
(ix)	that he will refrain from parties the Course is taken:	rticipation in political activities not norma	ally permitted in the institutional in which

that he will not change his subjects of study or programme of training or take any additional courses without

that he will not leave the country unless with the joint approval of his Ministry of Education as well as that of

the Centre Director.

the prior written permission of the Director; and

- If the Scholar shall:-
 - be idle or grossly misbehaves himself towards the supervisors, tutors, or instructors associated with the Course or commit a breach of his obligations under this deed; or
 - (ii) by reason of illness or injury be unable to carry out his obligations under this deed;

Then in either of those cases SEAMEO may forthwith terminate the scholarship by giving notice to the Scholar but without prejudice to the rights of the parties hereunder in respect of any antecedent breach of the covenants and stipulations herein contained.

- 4. The Scholar for himself and his/her personal representative hereby further undertakes:-
 - to absolve SEAMEO including its servants from any liability to the Scholar for loss of life or injury to his person
 or damage or loss to his property arising from the negligence of the servants of SEAMEO; and
 - (ii) to indemnity and keep harmless SEAMEO against all proceedings, suits, actions, claims, demands, costs and expenses whatsoever which may be taken or made against SEAMEO or incurred or become payable by SEAMEO in respect of injury (whether fatal or otherwise) to any person of damage or loss to any property occasioned directly of indirectly by any act, omission or other default by the Scholar while on or otherwise in relation to or arising out of the Course.
- Is is hereby agreed that any right, function or power conferred on SEAMEO under this deed may be exercised by the Director or any person duty authorized by him in that behalf.

IN WITNESS WHEREOF the Scholar and SEAMEO by its duty authorized representative have set their hands and seals hereunto the day and year first above written.

HE SCHEDULE ABOVE REFERRED TO Signed, seated and delivered by The SCHOLAR in the presence of: Signature (Signature of SCHOLAR) (Witness) Name Address Signed, sealed and delivered by the DIRECTOR of the SEAMEO Regional Centre for Education in Science and Mathematics in Penang Malaysia, who has been duty authorized to act in that behalf for the Signature (Signature of DIRECTOR) (Witness) RECSAM Name)

.....

CHECKLIST OF THE DOCUMENTS TO BE SUBMITTED TO SEAMEO RECSAM BY EACH APPLICANT

Name:
Country:

No	ITEM	QUANTITY	YES/NO
1	APPLICATION FORM	1	
2	PHOTOCOPY OF PASSPORT* (Only the front page with participants' particular are required)	1	
3	MEDICAL REPORT	1	
4	ENGLISH PROFICENCY CERTIFICATE	1	
5	SCHOLAR AGREEMENT	1	

Note: Deadline for nomination form submission is 17 December 2018

MEMORANDUM OF AGREEMENT (Scholarship Contract)

		 	 				age and with residence a (HOME ADDRESS) (SCHOOL)						
	/STATION)												
				AND (VENU									
the fol	lowing ter			TES OF TH	E COUF	SE) d	o hereb	y agree	to obse	erve			

- a. shall maintain the academic standards and other course requirements set for by the program of the institution and Department of Education (DepEd) and that failure to do so would be sufficient grounds for disqualification and termination of the scholarship;
- b. shall conduct myself in such manner as not to bring disgrace or dishonor to myself, the institution and the DepEd;
- c. shall return to my official station and resume my functions immediately upon the completion or termination of my scholarship or training grant;
- d. shall, at the end of my scholarship or training grant, submit to the head of my office and the Department of Education (DepEd) through the National Educators Academy of the Philippines (NEAP) a copy of my scholarship reports containing lessons for the conduct of echo seminars to share new learnings, teaching innovations, and strategies to my co-teachers and administrators; various trainings, program highlights and general impressions constituting my (scholar's) evaluation of the program;
- e. shall, upon return to my station, implement the echo seminars and submit reports to the Professional Development Division, National Educators Academy of the Philippines at Second Floor, Mabini Building, DepEd Complex, Meralco Avenue, Pasig City;
- f. shall teach the subject / conduct echo seminars on the course in which I was granted the scholarship and continue to serve my school / division / region for at least three years which is the service obligation equivalent for a year of scholarship or a fraction thereof;
- g. shall refund in full to the Department of Education such sums of money as may have been defrayed by the Philippine government for expenses incidental to my scholarship, for failure to comply with any of the foregoing

conditions through my fault or willful neglect, resignation from the service, transfer to other agencies, voluntary retirement or other causes within my

DepEd Scholar (signature over printed name)	Chairman, Scholarship Committee (signature over printed name)
ness:	
	Regional Director* (signature over printed name)

^{*}initials of immediate supervisor under Director's signature
**initials of other members of the Scholarship Secretariat

REPUBLIC CITY OF	OF THE PHILIPPINE	(S)) S.S.	
	ORE ME, a Notary Pu he following:	iblic, for and in the a	above jurisdiction, personally
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REPUBLIKA NG PILIPINAS

REPUBLIC OF THE PHILIPPINES

KAGAWARAN NG EDUKASYON DEPARTMENT OF EDUCATION REHIYON VII, GITNANG VISAYAS REGION VII, CENTRAL VISAYAS

Sudlon, Lahug, Cebu City



FEB 1 9 2018

REGIONAL MEMORANDUM

No. 10 1 4 2 s. 2018

REGULAR COURSE (BATCH 2) OFFERED BY SEAMEO RECSAM FOR FISCAL YEAR 2018 (1-26 APRIL 2019)

Schools Division Superintendents/OICs To

- Enclosed is a memorandum from Dr. Lorna Dig Dino, Undersecretary, Curriculum and Instruction, re Regular Course (Batch 2) Offered by SEAMEO RECSAM for Fiscal Year 2018 (1-26 April 2019), for your appropriate action.
- 2. For particulars, refer to the attached communication.
- For inquiries and clarifications you may contact the DepEd Scholarship Secretariat at (02) 633-9455 or by email at neap.pdd@deped.gov.ph.
- Wide dissemination of this memorandum is desired.

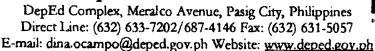
Director III Officer-In-Charg

JAJ/STJ/mab



Republic of the Philippines

Department of Education





343924

Undersecretary for Curriculum and Instruction

MEMORANDUM DN-CI-2018-00085

Scholarship Advisory No. 04, s. 2018

TO

Regional Directors

Schools Division Superintendents

Heads of Public Elementary and Secondary Schools

FROM

MARNA DIG

NA DIG DINO, Ph.D.

Undersecretary for Curriculum and Instruction

SUBJECT

Regular Course (BATCH 2) Offered by SEAMEO RECSAM for

Fiscal Year 2018-2019 (1-26 April 2019)

DATE

29 January 2018

The SEAMEO RECSAM announces its regular courses for Senior Educators and teacher trainers of SEAMEO member countries for Fiscal Year 2018-2019 (1-26 April 2019):

Course Code	Course Title	Deadline of Submission of Requirements	Number of Scholarships Available
RC-SS-143-3	Purposeful Assessment in Secondary Science Classrooms	7 December 2018	One (1) slot
RC-PM-143-4	Enhancing Science, Technology, Engineering and Mathematics (STEM) Learning in Primary Mathematics Classrooms	7 December 2018	Two (2) slots

The qualifications required for the course participants are described in Annex B (Regular Courses for Fiscal Year 2018-2019 (Batch 2), 1-26 April 2019.

The nominated participants must:

- 1. Be in good health both physically and mentally and certified medically fit in order to complete the course (Applicants must submit his/her medical certificate together with the application form);
- 2. Be considered as a nominee only upon receipt of the duly completed application form of the nominees;

- 3. Submit a photocopy of the front page of their passport with their particulars clearly printed; and
- 4. Complete the application forms in duplicate copies. Completed application forms, scholar agreement, medical report, photocopy of international passport and other relevant documents of the nominated candidates must be sent to RECSAM before the deadline given.

All other required documents must be submitted via email at neap.pdd@deped.gov.ph on or before the stated deadline.

The application form and other details of the program are enclosed in this memorandum. For further inquiries and clarifications, you may contact the DepEd Scholarship Secretariat at (02) 633-9455 or thru email at neap.pdd@deped.gov.ph.

Immediate dissemination of and appropriate action for this memorandum is desired.

Annex A: List of Requirements

B: Regular Courses for FY 2018-2019 Batch 2, 1-26 April 2019 (Course Information)
C: Application Form
D: Medical Report Form
E: Scholar Agreement
F: Checklist for the documents to be submitted to SEAMEO RECSAM

G: Scholarship Contract

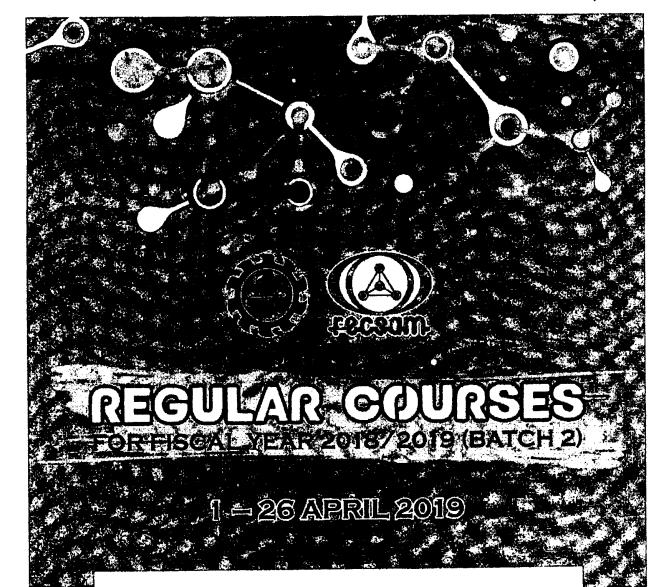
LIST OF REQUIREMENTS

A. Qualifications

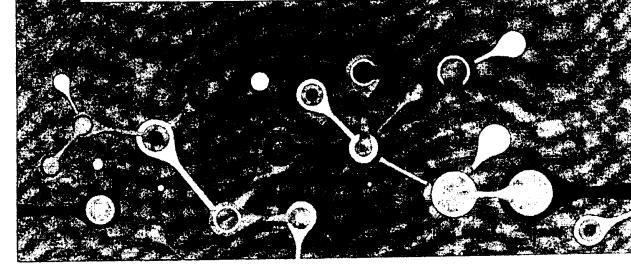
- a. Filipino citizen
- b. At least a bachelor's degree holder
- c. Fifty (50) years and below
- d. With Salary Grade of 20 to 24
- e. Must have rendered at least two (2) years of service in the government (DepEd) at the time of nomination
- f. Must hold a permanent appointment at the organization nominating him/her
- g. Must have obtained at least a Very Satisfactory performance rating for two (2) consecutive period preceding the nomination
- h. Must have no pending administrative and/or criminal case
- i. Must have no pending nomination for scholarship in another program/course
- Must have already rendered the required service obligation for a scholarship previously enjoyed
- k. Willing to sign a service contract up to one year after completing the program
- Must meet the position level, age, education and experience required and specified by the donor country/organization/course
- m. Must have a good command of the English language (spoken and written)
- n. Physically and medically fit to travel
- o. Not an expectant mother

B. Documentary

- a. Nomination Form 1-B
- b. Assessment Form 1-D
- c. Nomination Form 1-F: Agency Screening Certification
- d. Admission Form 3: Medical Certificate
- e. Letter of Application addressed to the donor organization
- f. Endorsement from Regional Director on his/her duly authorized representative
- g. Personal Data Sheet
- h. Statement of present actual duties and responsibilities relevant to the course/program, signed by the immediate supervisor
- i. Transcript/s, of Records and Diplomas for all degrees attained (4 certified copies)
- i. Service record
- k. Performance rating for two (2) consecutive rating periods immediately preceding the nomination
- Certification that the applicant has no pending application for scholarship under another program signed by the immediate supervisor
- m. Certification of no pending administrative and/or criminal case signed by the applicant's respective legal / administrative officer
- Medical certificate of physical fitness issued by a physician from a recognized accredited health institution but not the same institution where the applicant is presently employed



COURSE DESCRIPTION



REGULAR COURSES FOR FISCAL YEAR 2018/2019 (Batch 2)

1 - 26 April 2019

COURSE CODE	Second Se	SCHOLARSHIPS OFFERED PER CHECOUNTRY
RC-SS-143-3	PURPOSEFUL ASSESSMENT IN SECONDARY SCIENCE CLASSROOMS	1
RC-PM-143-4	ENHANCING SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) LEARNING IN PRIMARY MATHEMATICS CLASSROOMS	2

Level
P: Primary
S: Secondary

Subject S: Science M: Mathematics



SOUTHEAST ASIAN MINISTERS OF EDUCATION ORGANISATION REGIONAL CENTRE FOR EDUCATION IN SCIENCE AND MATHEMATICS

Jalan Sultan Azlan Shah, 11700 Gelugor, Penang, Malaysia Telephone: 604-6522700 Fax: 604-6522737

Website: http://www.recsam.edu.my/

REGULAR COURSES FOR FISCAL YEAR 2018/2019

Course Code: RC-SS-143-3

Course Title: PURPOSEFUL ASSESSMENT IN SECONDARY SCIENCE CLASSROOMS

Rationale:

Assessment is a fundamental issue in science education and perceived to be the driving force in curriculum development and implementation, and in the teaching and learning process in the classroom. Since the new generation of students are required to think critically, justify, evaluate, synthesise, and apply knowledge in new contexts, as well as solve problems, and communicate effectively in a scientific discourse, the structure of the assessment system inevitably needs a deeper look. In addition, accountability for student achievement, emphasis on national and international assessment programmes, and global competition – all contribute to the increased demands for assessment.

Purposeful assessment practices steer teachers and students to understand where they have been, where they are at present, and where they are heading. There is a need to consider the meaningful role of assessment even during the process of teaching and learning rather than considering assessment only upon completion of the teaching and learning process. Thus, the link between science assessment, pedagogies used and instructional practices adopted in the classroom has to be well defined and well established.

The various perspectives assumed by assessment namely, assessment as learning, assessment of learning, and assessment for learning are integral for effective science teaching and learning. Even though they take different forms, overlap and interact, no single assessment method can provide sufficient information to effect positive changes in leaching and learning. The key to purposeful assessment is to align the assessment to the teaching objectives and the instructional approach used and to use different types of assessments as part of instruction results in providing useful information about student understanding and progress.

Objectives

The course aims to equip participants with the knowledge, attitude, skills and habits to operationalise the important role of purposeful assessment in the teaching and learning process. It is hoped that the participants will gain exposure to current and effective research-based assessment strategies and practices that are aligned with established educational theories and routine classroom practices.

At the end of the course, the participants should be able to:

- gain understanding on the nature, purposes, types, and practices of assessment;
- explain the interrelationships of assessment with pedagogy and curriculum in the teaching and learning process;
- discuss the potential influences of international, centralised and school-based assessments to classroom teaching and curriculum development;
- 4 enhance skills to align current active science teaching and learning approaches that promote higher-order thinking, creative thinking and critical thinking skills to assessment:

- 5 develop tasks and assessment instruments to gauge students' achievement in science:
- 6 integrate technology in science assessment; and
- 7 plan, design and implement science lesson by adapting an instructional design with emphasis on assessment as well as congruency to content and pedagogy.

Course Contents

This course emphasises on a deep grounding of theory and research on the principles, purposes and practices of assessment and learning. The participants will explore on the relationship of assessment to pedagogy, curriculum and instructional practices in the classroom.

The course also focuses on the significance of assessment in planning science lessons and the coherence of the essential components such as lesson objectives formulation, instructional strategy selection and assessment procedure appropriate with the end view of improving student learning and teaching effectiveness. It is essentially activity-oriented and calls for deep reflection of the participants' professional experiences pertaining to the various issues and challenges encountered in the teaching and learning of science. The course activities are designed to cater for discussions, presentations, and hands-on and minds-on sessions.

The major areas include:

- 1. Trends and Issues in Assessment in Science Education
- 2. Fundamentals of Assessment
 - 2.1 Nature, Purposes and Practices
 - 2.2 Relationships of Assessment as, for and of Learning
- Potential Influences of International, National and School-based Assessment in Student Learning
- 4. Aligning Science Pedagogy and Assessment Practices
 - 4.1 Constructivism and its Implications to Assessment
 - 4.2 Formative and Summative Assessments in Science Classrooms
 - 4.3 Self Assessment and Peer Assessment
- 5. The Use of Information and Communications Technology in Assessment
- Enhancing Teacher's Understanding and Practices on the Role of Assessment
 - 6.1 Performance Tasks
 - 6.2 Rubrics
 - 6.3 Importance of Feedback
 - 6.4 Observation Skills
 - 6.5 Questioning Techniques
 - 6.6 Analyses of Students' Work and Homework
 - 6.7 Developing Student Motivation for Learning
- 7. Planning and Developing Science Lessons, Trying-out and Improving Adopting Appropriate Strategies, Skills and Assessment Practices, through the Lesson Quality Improvement Process.

Duration: Four weeks

Participants: Science Educators or Key Secondary Science Teachers

English Proficiency: Minimum IELTS Band 5.0 or Equivalent and able to Communicate Moderately in English

Expected Output: 1. Project Work Report

2. Multiplier Effect Action Plan

References:

Creemers, B., Kyriakides, L. & Panayiotis, A. (2013). Teacher professional development for improving quality of teaching. Springer Science and Business Media Dordrecht

Corrigan, D., Gunstone, R. & Jones, A. (Eds) (2013). Valuing assessment in science education: Pedagogy, Curriculum, and Policy. Springer Science and Business Media Dordrecht.

Gardner, J. (Ed) (2012), Assessment and learning second edition, SAGE Publication Ltd. London, Goldston, M.J. & Downey, L. (2013). Your science classroom: Becoming an elementary/middle school science teacher. SAGE: USA

Greenstein, L. (2012). Assessing 21st century skills: A guide to evaluating mastery and authentic learning. Corwin. USA

Griffith, A. & Burns, M. (2012). Outstanding teaching series: Engaging learners. Crown House Publishing Limited. UK

Llewellyn, D. (2013). Teaching high school science through inquiry and argumentation 2nd edition. Corwin, USA

Oversby, J.(Ed) (2012). ASE guide to research in science education. The Association for Science Education, College Lane, Hatfield, Herts AL109AA

Wellington, J. &Ireson, G. (2012). Science learning, science teaching, 3rd edition. Routledge: NY Wiggins, G., &McTighe, J. (2005). Understanding by Design. Alexandria, Virginia: Association for Supervision

Course Code: RC-PM-143-4

Course Title: ENHANCING SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) LEARNING IN PRIMARY MATHEMATICS CLASSROOMS

Rationale:

The term "Science, Technology, Engineering and Mathematics (STEM) education" refers to teaching and learning in the fields of Science, Technology, Engineering and Mathematics. Students need education with a solid foundation in STEM so that they are prepared to work and live in the 21st century. A STEM education, particularly in enabling mathematics, provide students the foundations to acquire further skills as they make their lifetime transitions to the labour market.

Promoting mathematical processes such as problem solving, reasoning, communication, making connections and representation with STEM approach might bridge the gap between students' interest and how lessons are taught. The research finding in the last two decades show that simulations, animations and game-based-learning provide promising results for improving students' learning outcomes in STEM education. These ICT applications can support STEM education as they provide the platform to teach skills such as critical thinking, multitasking, strategising, problem-solving, and team building. STEM when embedded with ICT has the potential contribution to increase global awareness through collaboration with field experts and Smarter Classrooms, support exploration and experimentation by providing immediate as well as visual feedback, and focus attention on real-world applications of STEM concepts through relevant technologies. Assessment can be integrated directly with learning environments through innovative forms which takes place when using educational animations, simulations and games. The integration of Information and Communication Technologies (ICT) into STEM education is recognised as providing opportunities for developing skills for the 21st century and having the potential to transform pedagogical practices.

Objectives:

The main objective of the course is to provide participants the necessary knowledge and skills in conducting STEM in their own classrooms.

At the end of the course, participants should be able to:

- 1 acquire basic knowledge on mathematical thinking that promotes STEM education;
- 2 develop skills necessary to improve teaching and learning of STEM;
- 3 adopt necessary skills for effective teaching and learning of primary mathematics
- 4 integrate ICT in STEM Education using tools such as simulations, animations and game-based-learning;
- 5 assessment for STEM; and
- 6 use the lesson quality improvement process to develop quality lesson plans that illustrate the integration of computer games in mathematics lessons that promote mathematical thinking.

Course Contents:

This course emphasises a good learning of theory with reflective classroom practices based on STEM. STEM has the potential to increase teachers' and learners' productivity. The knowledge and skills acquired would enable them to initiate STEM for improving primary mathematics classroom practices in their respective schools upon returning to their own countries after this course.

The major areas include:

- 1 Mathematical Thinking
 - 1.1 Issues and Trends in Mathematics Education
 - 1.2 Design Activities and Classroom Interactions that Highlight the Mathematical Processes of:
 - 1.2.1 Problem Solving
 - 1.2.2 Reasoning and Proving
 - 1.2.3 Mathematical Connection
 - 1.2.4 Representation
 - 1.2.5 Communication
 - 1.3 Metacognition
 - 1.3.1 Metacognitive Knowledge
 - 1.3.2 Metacognitive Representation
 - 1.3.3 Metacognitive Experience
- 2 Teaching Approaches for Promoting STEM
 - 2.1 Structured Problem Solving
 - 2.2 Problem Solving [Model and Heuristics]
- 3 Skills Needed for STEM
 - 3.1 Facilitation Skills
 - 3.2 Inquiry Skills
- 4 ICT Integration and Assessment for STEM
 - 4.1 Simulations
 - 4.2 Animations
 - 4.3 Game-based-Learning
- 5 Assessment for STEM
 - 5.1 Technology-based Assessment for STEM Education
- 6 Lesson Quality Improvement Process
 - 6.1 Lesson Quality Improvement Process (Theory into Practice);
 - 6.2 Planning, Developing, Trying-out and Improving Quality Lesson Plans that Illustrate the Integration of Simulations, Animations and Games in Mathematics Lessons that Promote Mathematical Thinking in STEM Education;

Duration: Four weeks

Participants: Mathematics Educators or Key Primary Mathematics Teachers

English proficiency: Minimum IELTS Band of 4.5 or Equivalent

Expected output: 1. Project (Research) Work Report

2. Multiplier Effect Action Plan

References:

- Atkinson, R., Hugo, J., Lundgren, D., Shapiro, J., & Thomas, J. (2007). Addressing the STEM Challenge by Expanding Specialty Math and Science High Schools. *The Information Technology and Innovation Foundation*, 1-13.
- Doerr, H. (2006). Examining the tasks of teaching when using students' mathematical thinking. Educational Studies in Mathematics, 62(1), 3-24.
- Greenes, C. (1995). Mathematics learning and knowing: A cognitive process. *Journal of Education*, 177(1), 85-106.
- Flegg, J., Mallet, D., & Lupton, M. (2012). Students' perception of the relevance of mathematics in engineering. *International Journal of Mathematical Education in Science and Technology*, 43(6), 717-732.
- Prediger, S. (2001). Mathematics learning is also intercultural learning. *Intercultural Education*, 12(2), 163-171.
- Smetana, L. K., & Bell, R. L. (2012). Computer simulations to support science instruction and learning: A critical review of the literature. *International Journal of Science Education*, 34(9), 1337–1370.
- Wolf-Watz, M. (2001). Developing pupil's mathematical thinking: Student teachers' beliefs and conceptions of mathematics education at the end of their initial teacher education, NERA congress in Stockholm.

CONTACT US

For further information, please contact:

Centre Director SEAMEO RECSAM Jalan Sultan Azlan Shah 11700 Gelugor Penang, Malaysia

Tel: +604 6522 700 Fax: +604 6522 737

Email: director@recsam.edu.my

Officer in-charge:

Ms. Rabiatul Adawlah | Email: rabiatul@recsam.edu.my | Tel: +604 6522 743



SEAMEO REGIONAL CENTRE FOR EDUCATION IN SCIENCE AND MATHEMATICS Jalan Sultan Azlan Shah, 11700 Gelugor, Penang, Malaysia

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Recent

APPLICATION FORM

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