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DEPARTMENT OF EDUCATION
RECORDS SECTION, REGION I
023078
OCT 31 2024

Republic of the Philippines
Department of Education
REGION I

REGIONAL MEMORANDUM
No. 1438, s. 2024

INVITATION TO THE TRAINING ON DOWNSTREAM DATA UTILIZATION

To: Schools Division Superintendents
All others concerned

1. The Philippine Space Agency (PhilSA) will be conducting a Training on Downstream Data Utilization on November 25-29, 2024 at Quezon City. (Exact venue will be announced).

2. The activity is part of the PhilSA's Space Education and Awareness Program (SEAP) to promote public awareness and understanding of space science and technology applications (SSTA) by providing opportunities for professionals in the SSTA fields, students and teachers at all levels to learn about the peaceful uses and its applications.

3. The goal of the training is to equip participants with the knowledge and skills needed to facilitate or conduct research studies related to remote sensing, Geographical Information System (GIS), and satellite data utilization and applications, as well as to teach the course.

4. The Schools Division Offices (SDOs) are requested to recommend one (1) Secondary teacher who handles any of the following: Research, Science, Physics, Earth Science, Computer Science, Engineering, and Technology.

5. The SDOs through the Human Resource Division (HRD) SEPS shall notify the Human Resource Development Division (HRDD) Regional Office on the recommended participant **on or before November 4, 2024**.

6. The recommended participants from SDOs shall send their application through this link: https://form.jotform.com/240106907972452 **on or before November 7, 2024**. Attached is the Information Sheet for the application requirements.

7. The training capacity is limited to 30 participants nationwide. Successful applicants will be notified by email within 3-5 working days after the deadline. No registration fee will be collected and PhilSA will shoulder the food and accommodation. The travel and other related expenses may be charged to MOOE subject to the usual accounting and auditing rules and regulations.

5. For queries and other concerns, please contact Mr. Neil Juvert F. Valentino, Senior Science Research Specialist, Space Education and Scholarships Division through email at sesdo.philsa.gov.ph or call at +632 8568-99-31.

6. For information and dissemination.

For the Regional Director:

ATTY. RHEA JOY L. CARBONELL
Chief Administrative Officer

Reference: Invitation letter of PSA
Encl.: Information Sheet
To be indicated in the Perpetual Index
Under the following subjects:

TEACHERS TRAININGS

Documan S
DepEd RO1 HRDD241473

HRDD/aac/RM_PSAInvitation
October 30, 2024

November 4, 2024

TO: **Mrs. Editha C. Bagcal, School Prinicipal IV, ISNHS**

Please advise Mr. Pastor V. Yabot Jr., Teacher II to send his application to the Training on Downstream Data Utilization through this link: https://form.jotform.com/240100907972452 on or before November 7, 2024.

For information and guidance.

VILMA D. EDA, CESO V
Schools Division Superintendent

SCHOOLS DIVISION OFFICE
DEPED VIGAN CITY
05 NOV 2024
RELEASED
BY:

Republic of the Philippines
Office of the President

Philippine Space Agency

BAGONG PILIPINAS

Training Course on Downstream Data Utilization

INFORMATION SHEET

Dates: 25 – 29 November 2024

Venue: Quezon City (Exact venue will be announced)

Background/Rationale:

PhilSA's Space Education and Awareness Program (SEAP) aims to promote public awareness and understanding of space science and technology applications (SSTA) by providing opportunities for professionals in the SSTA fields and students and teachers at all levels to learn about the peaceful uses and applications of space science and technology and enriching their knowledge, skills, and experience in science. It is envisioned that through this program a sustained pool of experts critical for future space programs and an agile SSTA workforce capable of responding to societal needs and nation-building is enabled, developed, and supported.

Activities under the program are designed to support continuing professional development and the achievement of the basic education and higher education curriculum outcomes and includes, but are not limited, to the following:

1. Trainings in SSTA for professionals in the field, teachers and students
2. Teaching/Learning Materials development for SSTA
3. Internship/Immersion of students
4. Support for research or science investigatory projects
5. Other outreach programs/activities

Downstream data utilization is increasingly gaining importance due to its wide application. The utilization of spaceborne data into many aspects like climate change, disaster readiness and risk reduction, environmental monitoring, and research, among others, have been beneficial and advantageous. This improved resource-sharing and enhanced public access are instrumental to the transfer and diffusion of space technologies towards a robust and dynamic local space industry.

The pilot implementation of the Training Course on Downstream Data Utilization invites teachers/educators from the basic and higher education institutions, graduate students and professionals in the SSTA fields and other interested parties. The course aims to equip participants with the knowledge and skills needed to facilitate or conduct research studies related to remote sensing, Geographic Information Systems (GIS), and satellite data utilization and applications, as well as to teach the course. Participants will be introduced to principles of remote sensing, platforms and sensor systems, digital image processing, Geographic Information Systems, mapping and projection systems, spatial data models and analysis, and assessment and validation of map accuracy, among others. The participants will also be introduced to field data collection techniques and the various applications of remote sensing and GIS.

Purpose

The training course aims to equip participants with the knowledge and skills needed to facilitate or conduct research studies related to remote sensing and GIS-related topics, satellite data utilization and applications. The participants are expected to:

1. Gain understanding of concepts and principles of remote sensing.
2. Demonstrate understanding of space data utilization by processing and interpreting data from different QGIS, models, maps, and projections.

Participants

This course is open to the following:

- Teachers/Educators from the basic or higher education handling Research, Physics, Earth Science, Computer Science, Engineering, or Technology subjects
- Professionals and graduate students in various SSTA fields
- Enthusiasts interested in learning and conducting research related to remote sensing, GIS, and satellite data utilization and applications.

A maximum of thirty (30) participants shall be admitted to the course.

Application Procedure

Candidates wishing to apply for this course should follow the following steps:

1. Prepare the following supporting documents
    a. Recommendation/Endorsement letter from the university/institution/company where the applicant is employed. Sample letter can be accessed here: https://bit.ly/SampleEndorsement . If unemployed, please provide a letter of intent. For graduate students, please provide a recommendation letter from research supervisor/adviser
    b. One recent 1x1 ID picture.
2. Applicants may submit their applications through the online application form or by email,
    a. For online application form - Fill out application form completely and submit through this link: https://form.jotform.com/240100907972452
    b. By email – download and fill out https://bit.ly/ApplicationFormTCDDU . Send completed form along with the supporting documents to sesd@philsa.gov.ph, with the subject: **Application for Training Course on Downstream Data Utilization.**
3. Deadline for applications is 31 October 2024 (Thursday). Only applications with complete documents will be evaluated.
4. Training capacity is limited to 30 participants only. Successful applicants will be notified by email within 3–5 working days after the deadline

Administrative Arrangements

Participation in the course is free of charge. PhilSA will cover the accommodation, refreshments and lunch of the participants for the duration of the training. However, the participants should cover all other expenses (e.g. transportation, dinner, miscellaneous) necessary to participate in the course. It is clearly understood that each candidate and their organization/institution, in applying and in recommending/endorsing the participants, undertake the responsibility for such coverage. This includes any special arrangements related to the participant's work schedule/load to ensure the participants full participation and successful completion of the course. Course applicants and their nominating authorities will be informed in due course of the names of the candidates who have been selected.

Provisional Overall Program of Activities

Time	Code	Topic/Subtopic/Activity
Day 1 (25 November)		
8:00 – 8:30	-	Registration
8:30 – 9:00		Opening Program
9:00 – 9:30		
9:30 – 10:00		**Health Break**
10:00 – 10:30	L1	Introduction to Remote Sensing (RS) • Remote sensing basics and history • Remote sensing in our daily lives
10:30 – 11:00		
11:00 – 11:30		
11:30 – 12:00	L2	Platforms and Sensor Systems • Remote sensing platforms • Satellite remote sensing concepts
12:00 – 1:00		**Lunch**
1:00 – 1:30	L3	Satellite Image Bands and Band Combinations • Satellite remote sensing for Earth observations
1:30 – 2:00		
2:00 – 2:30	L4	Downloading Open Remote Sensing Data
2:30 – 3:00	L5	Image Pre-Processing, Interpretation and Transformation
3:00 – 3:30		
3:30 – 4:00	E1	Exercise: Image Pre-Processing Interpretation and Transformation
4:00 – 4:30		
4:30 – 5:00		
Day 2 (26 November)		
8:00 – 8:15		Management of Learning
8:15 – 9:00	L6	Image Classification • Basic concepts of image classification • Classification approaches and methods
9:00 – 9:30		
9:30 – 10:00		
10:00 – 10:30		**Health Break**
10:30 – 11:00	E2	Exercise: Image Classification • Land cover classification
11:00 – 11:30		
11:30 – 12:00		

Time	Code	Topic/Subtopic/Activity
12:00 – 1:00		**Lunch**
1:00 – 1:30	L7	Introduction to Google Earth Engine
1:30 – 2:00		
2:00 – 2:30	E3	Exercise: Flood Mapping Using Google Earth Engine
2:30 – 3:00		
3:00 – 3:30		Health Break
3:30 – 4:00	E4	Exercise: Forest Monitoring Using Google Earth Engine
4:00 – 4:30		
4:30 – 5:00		
Day 3 (27 November)		
8:00 – 8:15		Management of Learning
8:15 – 9:00	L8	Geographic Information System
9:00 – 9:30		
9:30 – 10:00	L9	Spatial Data Models
10:00 – 10:30		
10:30 – 11:00		**Health Break**
11:00 – 11:30	L10	Map Scale, Projections and Coordinate Systems
11:30 – 12:00		
12:00 – 1:00		Lunch
1:00 – 1:30	L11	Introduction to QGIS • QGIS installation • QGIS User-Interface
1:30 – 2:00		
2:00 – 2:30		
2:30 – 3:00		**Health Break**
3:00 – 3:30	E5	Exercise: Digitization and Google Earth Pro • Georeferencing Scanned Map through Coordinate Entry • Image to Image Registration • Google Earth Pro basics
3:30 – 4:00		
4:00 – 4:30		
4:30 – 5:00		
Day 4 (28 November)		
8:00 – 8:15		Management of Learning
8:15 – 9:00	L12	Working with Attributes and Tables
9:00 – 9:30		
9:30 – 10:00		
10:00 – 10:30		**Health Break**
10:30 – 11:00	L13	Spatial Analysis
11:00 – 11:30		
11:30 – 12:00		
12:00 – 1:00		**Lunch**
1:00 – 1:30	L14	Spatial Overlay
1:30 – 2:00		
2:00 – 2:30	L15	Map Elements

Time	Code	Topic/Subtopic/Activity
2:30 – 3:00		
3:00 – 3:30		**Health Break**
3:30 – 4:00	**E6**	Exercise: Create Flood Susceptibility Map
4:00 – 4:30		
4:30 – 5:00		
Day 5 (29 November)		
8:00 – 8:15		Management of Learning
8:15 – 9:00	**L16**	Field Data and Accuracy Assessment
9:00 – 9:30		
9:30 – 10:00		
10:00 – 10:30		**Health Break**
10:30 – 11:00	**E7**	Project Preparation
11:00 – 11:30		
11:30 – 12:00		
12:00 – 1:00		**Lunch**
1:00 – 1:30	**E8**	Project Presentation
1:30 – 2:00		
2:00 – 2:30		
2:30 – 3:00		
3:00 – 3:30		**Health Break**
3:30 – 4:00		Post-Test
4:00 – 4:30		Closing Program and Awarding of Certificates
4:30 – 5:00		

For inquiries, please contact the Space Education and Scholarships Division, Philippine Space Agency at sesd@philsa.gov.ph.