

Advisory No. 15, s. 2025

March 05, 2025

In compliance with DepEd Order (DO) No. 8, s. 2013
this advisory is issued not for endorsement per DO 28, s. 2001
but only for the information of DepEd officials,
personnel/staff, as well as the concerned public.
(Visit www.deped.gov.ph)

30th Summer Institute in the Natural Sciences and Mathematics (SINSM)

The College of Science - University of the Philippines Baguio (UPB) will be conducting its 30th Summer Institute in the Natural Sciences and Mathematics (SINSM) on April 3-5, 2025 at the University of the Philippines Baguio with the theme “Refining High School Education Instruction through Modern and Resilient Teaching and Research Methods”.

This event will feature lecture sessions and seminar-workshops, that focus on the latest developments in theory, applications and pedagogy in the major fields under the college such as Computer Science, Physics, Chemistry, Geology, and Sports Science.

Participation of interested DepEd officials/personnel/staff is **personal and on a voluntary basis** and shall be subjected to no-disruption-of-classes policy as stipulated in DepEd Order No. 9, s. 2005 titled “Instituting Measures to Increase Engaged Time-On-Task and Ensuring Compliance Therewith”.

Attached is the communication letter for detailed information.

For inquiries, clarification, or assistance, please contact:

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SUMMER INSTITUTE IN THE NATURAL SCIENCES AND MATHEMATICS

College of Science, University of the Philippines Baguio
Governor Pack Road, 2600 Baguio City
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5 March 2025

SORAYA T. FACULO, Ph.D. CESO VI
Schools Division Superintendent
Schools Division Office of Baguio City

Dear **Ma'am**,

Magandang Araw Po!

The **Summer Institute in the Natural Sciences and Mathematics (SINSM)** is an annual extension service of the College of Science (CS) in the University of the Philippines Baguio (UPB). Lecture and seminar-workshops have been conducted for secondary and tertiary teachers since 1990. These activities were organized to enhance their knowledge and skills on the basic and latest development in theory, applications and pedagogy in the major fields under the college. These are Biology, Mathematics, Computer Science, Physics, Chemistry, Geology, and Sports Science. This college activity seeks to offer venues by which educators in the Sciences and Mathematics in the Cordillera region, as well as nearby areas, are updated on current issues in the aforementioned fields. The lectures and skill-based workshops are inspired by the very objectives of the Commission on Higher Education (CHED) in its desire to inculcate academic excellence in the teaching of Science and Mathematics-allied degree programs thus, promote interest in and awareness of developments in the basic and advanced Sciences and Mathematics, together with the Department of Education's (DepEd) objectives to establish and maintain a complete, adequate, and integrated system of basic education relevant to the goals of national development.

The **30th SINSM** is scheduled on **April 3-5, 2025** at the **University of the Philippines Baguio** with the theme "**Refining High School Education Instruction through Modern and Resilient Teaching and Research Methods**". Each department in the college has its own sub-theme, schedule and venue for the activity.

Along with these, we are humbly requesting your good office for endorsement of this activity. In addition, dissemination of the event to all High Schools in the city. This activity has been granted **12 Continuing Professional Development (CPD) units** by the CPD council of the Professional Regulation Commission. Attached herewith is a copy of the brochure for the details of the event for your kind perusal. More details and updates about the event can also be found on our website (<https://cs.upb.edu.ph/>) and Facebook page (<https://www.facebook.com/sinsm.upbaguio>).

We thank you very much in anticipation of your favorable action and continuous support to these endeavors. For inquiries you may email us at sinsm.upbaguio@up.edu.ph.

Respectfully yours,

RACQUEL C. BARCELO, Ph.D.
Chairperson, 30th SINSM 2025 Committee
Mobile No. 0917 750 8547
E-mail: rcbarcelo@up.edu.ph

Noted:

GILBERT R. PERALTA, Dr. rer. nat.
Dean, College of Science

SINSM 2025 COMMITTEE

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Chairperson
sinism.upbaguio@up.edu.ph

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HUMAN KINETICS PROGRAM (HKP)

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CONTACT US

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REGISTRATION DETAILS

Registration Fee

	Early Bird	Regular
BIOLOGY	3,800 PHP	4,200 PHP
PHYSICAL SCIENCES	3,800 PHP	4,200 PHP
MATH AND COMPUTER SCIENCE	3,800 PHP (Regular) 3,300 PHP (MSP* Member)	4,200 PHP (Regular) 3,700 PHP (MSP* Member)
HUMAN KINETICS PROGRAM	2,800 PHP (Student**) 3,600 PHP	3,200 PHP (Student**) 4,000 PHP

*Mathematical Society of the Philippines
**limited to 15 slots only (first 5 slots per track)

Early registration period:
February 18, 2025 to February 28, 2025

Regular registration period:
March 1, 2025 to March 21, 2025

Registration fees are inclusive of the following:
Kits, AM/PM snacks and Lunch

For more details about the registration, please
send e-mail to concerned department.

There are limited slots for the event, thus, **the
program will not have a registration for walk-in
applicants.**

Connect with us!



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College of Science
University of the Philippines Baguio

30TH SUMMER INSTITUTE IN THE NATURAL SCIENCES AND MATHEMATICS

Theme: "Refining High School
Education Instruction through Modern
and Resilient Teaching and Research
Methods"

3-5 April 2025

SUSTAINABLE
DEVELOPMENT GOALS



ABOUT US

The **Summer Institute in the Natural Sciences and Mathematics (SINSM)** is an annual extension service of the College of Science. Since 1990, we had trained and updated secondary and tertiary teachers on the latest development in theory, applications and pedagogy, as well as refresher courses in the basic concepts in the fields of Biology, Mathematics, Computer Science, Physics, Chemistry, Geology, and recently in Sports Science. Our service is inspired by the very objectives of the Commission on Higher Education (CHED) in its desire to inculcate academic excellence in the teaching of Science and Mathematics-allied degree programs by strongly encouraging the conduct of lectures and seminar workshops that promote interest in and awareness of developments in the basics and advanced Sciences and Mathematics, together with the Department of Education's (DepEd) objectives to establish and maintain complete, adequate, and integrated system of basic education relevant to the goals of national development.

ABOUT THE THEME

This year's theme is **"Refining High School Education Instruction through Modern and Resilient Teaching and Research Methods,"** which focuses on refining pedagogical approaches and research techniques to support and sustain hybrid learning environments.

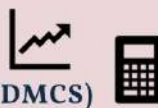
DEPARTMENT THEMES

DEPARTMENT OF BIOLOGY (DB)



The Department of Biology will offer lectures and workshops from experts that are aligned with the theme, **"Enhancing Lecture Content and Laboratory Skills in Teaching Selected Core Biology Topics"**. These sessions are designed to equip educators with the knowledge and skills to augment and refine biology education instruction and research. DB features two parallel tracks— Track A: General Biology and Track B: Molecular Biology. Track A highlights lectures and hands-on activities such as laboratory workshops in ecology and zoology, technology integration in science communication, analytical methods in natural product research using HPLC, light microscopy of biofilms, DIY chloroplast imprinting and basic paleontological workshop. Track B provides foundational training in molecular biology, including the review of the central dogma, DNA extraction, quantification, visualization, and troubleshooting workflows.

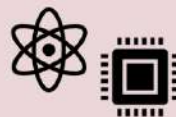
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCES (DMCS)



The Department of Mathematics and Computer Science adopts the theme **"Assessing the Effectivity of Modern Tools and Methods for Mathematics Teaching and Research through Partnerships"**.

DMCS will offer a plenary lecture on discussing gender literacy and the ways of avoiding common mistakes. The department will also offer three tracks of lecture-workshops. Track A: Mathematical Investigations and Technology will focus on training participants in utilizing Java programming, citizen science, and mobile robotics as tools and methods for teaching, research, and Mathematical investigation. Track B: Statistical Analysis will concentrate on training participants in using R/RStudio to analyze real-world data through data visualizations and Statistical Analysis Methods like Machine Learning, Polynomial Regression Analysis, Exploratory Data Analysis, and Time Series Analysis. Track C: Investigations and Modeling will focus on introducing the theories and methods of formulating Mathematical Models, such as the Ordinary Differential Equations (ODEs), and the utilization of numerical tools and technology in application to certain processes for further understanding and visualization.

DEPARTMENT OF PHYSICAL SCIENCES (DPS)



With a theme of **"Best Practices for Resilient, Inquiry-Based High School Physical Science Teaching and Research,"** the Department of Physical Sciences will present a series of lectures with plenary talks and parallel sessions for the disciplines of Physics, Chemistry, and Earth Science/Geology.

Plenary sessions include presentations on (1) strategies for integrating research into classroom practice, (2) AI-based tools for teaching and research, (3) identification of places of geological interest, and (4) up-to-date design of instructional materials. The department will also conduct parallel lecture-workshop sessions for the chemistry and physics disciplines. For chemistry, the lecture-workshop sessions will focus on strengthening the understanding of chemistry concepts and their real-life applications and the development of forensic chemistry-related teaching strategy. On the other hand, the physics discipline will deepen the understanding of physics concepts and their applications to enhance the engagement of students in physics classes.

HUMAN KINETICS PROGRAM (HKP)



At the 30th SINSM, the Human Kinetics Program is themed **"Advancing Physical Education and Sports through Innovative Courses and Instruction"**.

This initiative focuses on enhancing the educational experience for students and teachers by incorporating key elements such as curriculum innovation. This includes exploring diverse sports and activities like yoga, dance, martial arts, and adventure sports to meet varied interests and abilities. Additionally, it emphasizes ongoing professional development for teachers to stay updated on the latest trends and techniques, encouraging them to engage with professional networks and communities to share best practices and resources.



College of Science
University of the Philippines Baguio

30TH SUMMER INSTITUTE IN THE NATURAL SCIENCES AND MATHEMATICS



UNIVERSITY OF THE PHILIPPINES BAGUIO
3-5 APRIL 2025 (THURSDAY TO SATURDAY)

THEME:

*Refining High School Education Instruction through
Modern and Resilient Teaching and Research Methods*

**12 CPD
UNITS**
**(PROFESSIONAL
TEACHERS)**

Register now!

SUSTAINABLE DEVELOPMENT GOALS



074-442-7231





sinsm.upbaguio@up.edu.ph



30th SUMMER INSTITUTE IN THE NATURAL SCIENCES AND MATHEMATICS



"Refining High School Education Instruction through Modern
and Resilient Teaching and Research Methods"

CLUSTER REGISTRATION FEE & SLOTS	SUBTHEME/ TRACKS	REGISTRATION LINK (scan the QR code or click the link below)
<p>BIOLOGY (62 slots) Early bird fee: PHP 3800.00 Regular registration fee: PHP 4200.00</p>	<p>Enhancing Lecture Content and Laboratory Skills in Teaching Selected Core Biology Topics</p> <p>Track A: General Biology (50 slots) Track B: Molecular Biology (12 slots)</p>	 https://bit.ly/30SINSM-DBReg
<p>MATHEMATICS AND COMPUTER SCIENCE (100 slots) Early bird fee: PHP 3800.00 (Regular) PHP 3300.00 (MSP Member) PHP 2800.00 (Student)</p> <p>Regular registration fee: PHP 4200.00 (Regular) PHP 3700.00 (MSP Member) PHP 3200.00 (Student)</p>	<p>Assessing the Effectivity of Modern Tools and Methods for Mathematics Teaching and Research through Partnerships</p> <p>Track A: Mathematical Investigations and Technology (50 slots) Track B: Statistical Analysis (30 slots) Track C: Investigations and Modeling (20 slots)</p>	 https://bit.ly/30SINSM-DMCSReg
<p>PHYSICAL SCIENCES (Chemistry, Geology, Physics) (60 slots) Early bird fee: PHP 3800.00 Regular registration fee: PHP 4200.00</p>	<p>Best Practices for Resilient, Inquiry-Based High School Physical Science Teaching and Research</p>	 https://bit.ly/30SINSM-DPSReg
<p>HUMAN KINETICS PROGRAM (40 slots) Early bird fee: PHP 3600.00 Regular registration fee: PHP 4000.00</p>	<p>Advancing Physical Education and Sports through Innovative Courses and Instruction</p>	 https://bit.ly/30SINSM-HKPRReg