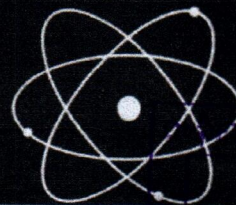


# 2020 LIKNAYAN



DIVISION OFFICE  
BAGUIO CITY

DEC 06 2019  
RECEIVED

October 24, 2019

Dr. May B. Eclar  
Regional Director  
Department of Education-Cordillera Administrative Region  
Wangal, La Trinidad, Benguet

RECEIVED  
NOV 29 2019  
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Dear Dr. Eclar:

Greetings!

PHYSIKA, UP Applied Physics Society is a duly recognized organization of Applied Physics students of the University of the Philippines - Los Baños. The organization aims to promote academic excellence and foster well-roundedness among its members. Moreover, it encourages the appreciation of Physics and Applied Physics, as well as raises scientific literacy by initiating activities in line with the objectives of the university and the nation.


As part of the organization's advocacy, an academic competition for high school students, entitled LIKNAYAN 2020 with the theme "*Chronoscope: A View of Physics through Time*", will be held on January 25-26, 2020 at the University of the Philippines - Los Baños. This event aspires to impart substantial knowledge to its participants on the topics of Physics and Applied Physics, as well as to relate these fields to the significance in our society. LIKNAYAN also aims to provide a memorable and worthwhile experience made for the high school students, their coaches and teachers, through various sub events. These include: The Amazing Race, APHY Talk, Battle of the Brains, Feature Writing, Photojournalism, and Science Investigatory Project.

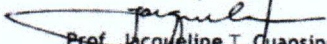
in line with this, the organization is asking your good office for the accreditation of LIKNAYAN 2020. Rest assured that this event will equip the students in expanding their curiosity, appreciation, and knowledge in the fields of Physics and Applied Physics.


The general guidelines and mechanics of the sub events are attached to this letter. Should you need more information about the event, we would gladly communicate with you through email ([liknayan.physika@gmail.com](mailto:liknayan.physika@gmail.com)), or phone with our contact persons Mark Andrew D. Navarro (09051849284) or Vince Paul E. Pantino (09064048320).

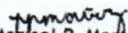
We are hoping for your favorable response. Thank you very much!


Respectfully,


  
Vince Paul E. Pantino  
Activity Head


  
Prof. Jacqueline T. Quansing  
Senior Adviser

  
Mark Andrew D. Navarro  
President

  
Ms. Marisol P. Martinez  
Junior Adviser

 /PHYSIKALIKNAYAN

 @PHYSIKALiknayan

 [physikaupib.org](http://physikaupib.org)

Republic of the Philippines  
Department of Education  
Cordillera Administrative Region  
Wangal, La Trinidad, Benguet

## ADVISORY

TO: **SCHOOLS DIVISION SUPERINTENDENTS  
ALL DIVISIONS  
ALL CONCERNED**

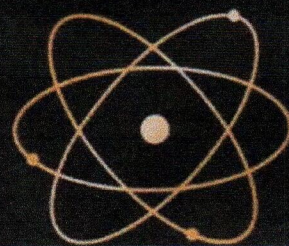
For information and dissemination.

November 29, 2019

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# GUIDELINES



## LIKNAVYAN 2020 General Guidelines

1. LIKNAYAN 2020, organized by PHYSIKA, UP Appied Physics Society, is open to all Grade 9 and 10 Junior high school (JHS) students.
2. The event is composed of five (5) competitive sub-events namely the Amazing Race, Battle of the Brains, Feature Writing, Photojournalism, and Science Investigatory Project, and three (3) non-competitive sub-events namely Drone Workshop, Socials Night, and APHY Talk.
3. Competitive sub-events: The overall contest points of each team will be the sum of points garnered from the competitive sub-events.; the three (3) schools with the highest accumulated points will be declared as champion, 1st runner up, and 2nd runner up.; in case of a tie in the overall ranking, the following scheme will be used to break the tie:
  - a. The school that has more first places in all four (4) sub-events will be declared winner over the school/s that it has tied with; otherwise,
  - b. the school that has more second places in all four (4) sub-events will be declared winner over school/s that it has tied with; otherwise,
  - c. the school that has more third places in all the four (4) sub-events will be declared winner over school/s that it has tied with; otherwise,
  - d. the school with the highest ranking in the Amazing Race will be declared winner over school/s that it has tied with.The champion will be the one to keep the revolving trophy for a year. Details regarding the revolving trophy are on a separate document.
4. Non-competitive sub-events: The participants and coaches are encouraged to attend these sub-events.
5. All participating students must wear their respective PE uniforms and school IDs in the event proper.
6. All participating schools must confirm their attendance during the registration before the start of the event proper.
7. The organizers has the right to revise the mechanics of the event. Any revisions that will be made will be announced prior to the opening of the event.

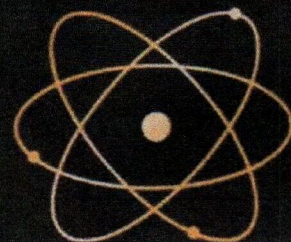
## Registration Guidelines

1. There will be a registration fee of Php 10,000 per participating team. A down payment of Php 6500 must be made upon registration. Full payment must be made during the registration in the event date.
2. Registration will be considered confirmed once the down payment is paid. Teams can pay the fee directly to this bank account:  
BPI Savings Account No.: 0913-3156-26  
Account Name: PHYSIKA UP APPLIED PHYSICS SOCIETY
3. The registration fee is inclusive of the following:
  - a. Event attire (for participants and coaches only)
  - b. Lunch meal and AM and PM snacks (for participants and coaches only)
  - c. Souvenirs
  - d. Unmanned Aerial Vehicle Workshop





# GUIDELINES



4. Upon confirmation, the following requirements must be sent to [liknayan.physika@gmail.com](mailto:liknayan.physika@gmail.com) with the subject (Liknayan 2020, Registration, [Name of School]):
  - a. Scanned copy of the accomplished registration form
  - b. High-resolution logo/seal
  - c. Soft copy of down payment's bank receipt (screenshot if payment is made online)
5. If changes are made regarding the lineup of team members, the organization must be notified not later than five (5) days before the event.
6. The deadline of submission of registration is on December 7, 2019 (Saturday).

## Competitive Sub-event Guidelines

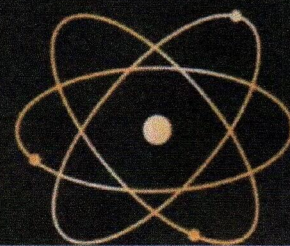
1. Each school who would like to participate can send at least one (1) team. Each team shall be composed of seven (7) Grades 9 or 10 JHS students and a coach.
2. Teams may assign participants to each sub-event:
  - a. 3 Battle of the Brains participants
  - b. 1 Photojournalism participant
  - c. 1 Feature Writing participant
  - d. 2 Science Investigatory Project participants
  - e. 1 faculty-in-charge/coach
  - f. 5 Amazing Race Participants
3. The competitive sub-events will be held simultaneously in different venues.
4. Teams may opt not to participate in any sub-events.
5. A revolving trophy will be given to the declared overall champion. The points per event are as follows:

Rank	Battle of the Brains	Feature Writing	Photojournalism	Amazing Race	Science Investigatory Project
1st	200 pts	100 pts	100 pts	200 pts	100 pts
2nd	150 pts	75 pts	75 pts	180 pts	75 pts
3rd	100 pts	50 pts	50 pts	160 pts	50 pts
others	50 pts	20 pts	20 pts	100 pts	20 pts





# GUIDELINES



## Awards and Prizes

1. The 1st, 2nd, and 3rd placers for each event will receive medals, certificate of recognition and merchandise shirts. Goods and cash prizes worth the following will be given:

Rank	Battle of the Brains	Feature Writing	Photojournalism	Amazing Race	Science Investigatory Project
1st	Php 1500	Php 500	Php 500	Php 3000	Php 1000
2nd	Php 1000	Php 300	Php 300	Php 2000	Php 600
3rd	Php 500	Php 200	Php 200	Php 1000	Php 400

2. All participants will receive a certificate of participation.

## Program Flow

1st day: January 25, 2020

Timeslot	Activity
7:00 AM - 9:00 AM	Opening Program
9:00 AM - 11:30 AM	Photojournalism, Feature Writing, and APHY Talk
11:30 AM - 1:00 PM	Lunch, and Science Investigatory Project Preparation
1:00 PM - 4:00 PM	Battle of the Brains and Science Investigatory Project
6:00 PM - 10:00 PM	Socials Night

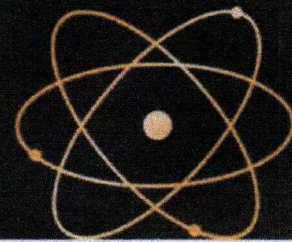
2nd day: January 26, 2020

Timeslot	Activity
8:00 AM - 11:00 AM	Amazing Race
11:00 AM - 12:00 PM	Lunch
12:00 PM - 2:00 PM	Drone Workshop
2:00 PM - 4:00 PM	Closing Ceremony





# MECHANICS AMAZING RACE



*The LIKNAYAN 2020: The Amazing Race* is an inter-school race that aims to boost the appreciation for Physics and Applied Physics in everyday life for Grades 9 and 10 JHS students. It will be composed of stations with activities revolving through a certain physics concept that will administer knowledge and worthwhile experience to the participants. Moreover, this sub-event will also promote a healthy competition among high school students.

## 1. General Guidelines

Teams are compelled to bring their own pens, with black or blue ink, for this event. Erasable pens are not allowed.

1.1. Each team can use only one (1) calculator; however, programmable calculators are strictly prohibited. The event organizers will check the calculators before the competition.

1.2. Teams are requested to wear their school's PE uniform. In a circumstance where a participant cannot provide his/her PE uniform, he/she is requested to wear any comfortable clothing but must wear his/her school's ID, the participant is requested to wear any comfortable clothing but must wear his/her school's ID.

1.3. The said sub-event will cover the practical applications of Physics and Applied Physics.

1.4. Cheating is strictly prohibited. Any participant responsible for committing such act merits automatic disqualification for the team.

1.5. Coaches can only observe the performance of his/her team members.

1.6. Any form of coaching is prohibited. Coaches must not provide answers for the participants or provide information in any way. This action will be counted as cheating and will be dealt accordingly.

1.7. Cellular phones, tablets, or any gadgets are not allowed in the contest area. The participants must hand over their gadgets to their coaches for safe keeping.

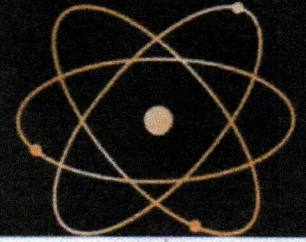
1.8. In case of a tiebreaker in the overall ranking, the team with most number of higher sub-event rankings will be declared winner.

1.9. There will be a sub-event head that will monitor the whole Amazing Race. In case any unforeseen matters arise, the sub-event head will be the deciding body. The decision of the sub-event head is final and irrevocable.





# MECHANICS AMAZING RACE



## 2. Contest Mechanics

- 2.1. The sub-event will be composed of eight (8) different stations. Teams are urged to run through all of the stations.
- 2.2. Each station has its own unique task to be fulfilled by all the teams.
- 2.3. Each team will be handed a detailed map of the school campus for navigation.
- 2.4. All the teams will start at an initial common place and will draw a number. The number will be their team number and will also represent the clues that will be given to them in each station.
- 2.5. After successfully completing the task in a station, the team will be given a clue for their next destination.
- 2.6. The team who is able to arrive first at the designated finishing point will be awarded the first place, the second team to arrive will be the second place, and so on.
- 2.7. Teams' finishing rank will have corresponding sub-event points.



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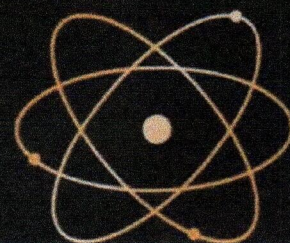
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# MECHANICS BATTLE OF THE BRAINS



*The LIKNAYAN 2020: Battle of the Brains* is an inter-school quiz competition that seeks to engage Grade 9 and 10 Junior high school students with deep appreciation in the field of Physics and Applied Physics in pursuing academic excellence, and at the same time, fostering a healthy competition among them. This year's Battle of the Brains is equipped with brain-twisting questions that test the students' intellect and critical thinking skills, which highlight the advancements in the fields of Physics and Applied Physics across time.

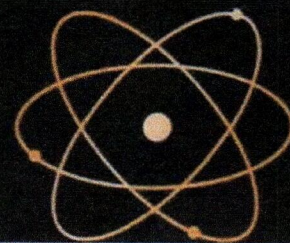
## 1. General Guidelines

- 1.1. Each participating team shall be composed of three (3) members only.
- 1.2. The participants should provide their own pens. Only pens with black or blue ink will be accepted. Erasable pens are strictly prohibited.
- 1.3. Scratch papers will be provided by the event organizers.
- 1.4. The coverage of the quiz contest includes the following:
  - i. Classical Mechanics
  - ii. Thermodynamics
  - iii. Optics
  - iv. Electromagnetism
  - v. Astronomy
  - vi. General Information on the field of Physics and Applied Physics
- 1.5. Every question will only have one (1) final answer unless stated otherwise.
- 1.6. Each team is allowed to use one (1) calculator only. However, programmable calculators are strictly prohibited. The event organizers will check the calculators before the competition.
- 1.7. Misspelled and incomplete answers will be considered incorrect.
  - 1.7.1. Full name should be stated if a person's name is being asked.
  - 1.7.2. Abbreviations will not be accepted unless it is a unit of measurement.
  - 1.7.3. Units of measurement should be indicated whenever necessary.
- 1.8. Any form of cheating is prohibited and shall be grounds for disqualification of the team.
- 1.9. Cellular phones, tablets, and any gadgets are not allowed in the event area. The participants must hand over their gadgets to their coaches for safe keeping.
- 1.10. A panel of judges composed of professionals in the fields of Physics and Applied Physics will monitor the event.
- 1.11. The decisions of the judges are final and irrevocable.





# MECHANICS BATTLE OF THE BRAINS



## 2. Contest Mechanics

- 2.1. There will be three (3) levels of difficulty in the quiz contest, namely: (1) easy, (2) average, and (3) difficult.
- 2.2. The questions that will be given are in the form of Multiple Choice, Identification, True or False, and Problem Solving.
- 2.3. Each question will be projected on the screen and will be read twice by the quiz master.
- 2.4. Each question in any given level of difficulty has corresponding time limit. For questions involving problem solving, teams will be given additional 30 seconds to answer.
- 2.5. There will be a total of 20 questions. The team/s to answer all the questions correctly will score a maximum of 135 points. The breakdown per round can be seen as follows:

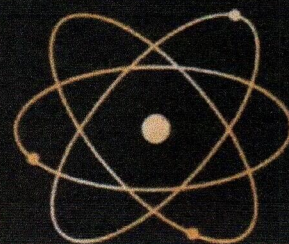
Level of Difficulty	Number of Questions	Points per Question	Time Limit (seconds)
Easy	10	5	10
Average	5	7	15
Difficult	5	10	30

- 2.6. Teams will write their answers on the sheet provided by their proctors.
- 2.7. Teams can only write their answers after the "Go" signal from the quiz master. Team(s) that will be caught writing before the "Go" signal will be given a warning for the first occurrence. Otherwise, if the team(s) will be caught again after a warning has been given, they will gain no credit for answering.
- 2.8. After every question, teams should pass their answer sheets to their corresponding proctors. Late answers will not be considered.
- 2.9. Teams will be allowed to raise clarifications after the correct answer is revealed. The panel of judges will be consulted regarding the clarification. Decisions made by the judges are final. When the next question has been read, clarifications regarding the previous question will no longer be entertained.
- 2.10. After all questions have been asked, top 3 scoring teams will be declared as 1st, 2nd, and 3rd place winners accordingly. In case of a tie in the top 3 spots, a clincher question will be asked.
- 2.11. **CLINCHER QUESTION:** Teams in the clincher round will be asked an identification question. Each question has an equivalent of 1 point and the first team to have a lead of 1 point will be declared the winner.





# MECHANICS PHOTOJOURNALISM



*The LIKNAYAN 2020: Photojournalism* is an inter-school photojournalism competition for Grade 9 and 10 Junior high school students which uses photographs as media to narrate a story and to convey information about the applications of Physics.

## 1. General Guidelines

- 1.1. The registered participants should provide their own camera. The camera to be used is in the preferences of the participants.
- 1.2. The memory storage device that will be used by the participants (e.g. SD cards, memory cards), must be cleared or void of any files/pictures and must be submitted upon registration. They will be returned before the event starts.
- 1.3. All participants must abide by the ethical rules of journalism.
- 1.4. Although the participants will roam around the campus, the event organizers will designate a meeting place for everyone, and the participants must be there at 9:00 AM sharp for the initial instructions and 11:00 AM sharp for submission of entries.
- 1.5. The panel of judges will be composed of professionals in the fields of Physics and Applied Physics, and Photography.
- 1.6. The decision of the panel of judges is final and irrevocable.
- 1.7. Winning entries will be included in Kalasag, the official publication of PHYSIKA, UP Applied Physics Society.
- 1.8. All entries will become the property of PHYSIKA, UP Applied Physics Society.

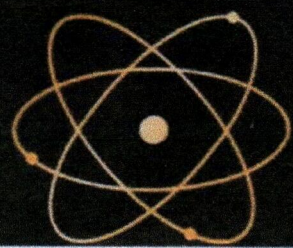
## 2. Contest Mechanics

- 2.1. The sub-event will last for two (2) hours. In this time, the participants are tasked to roam around the campus and take a photo of anything relevant to the given theme.
- 2.2. The theme for the sub-event will be announced at the start of the event.
- 2.3. The participants can only take pictures inside the University of the Philippines- Los Baños.
- 2.4. Photo editing such as scaling and other additive and reductive alterations are strictly prohibited. However, adjustments of brightness, contrast, sharpness, cropping, hue, and other color enhancements including shadows and highlights are allowed.
- 2.5. Use of props and actors is strictly prohibited.
- 2.6. Entry must not contain date stamps, watermarks or any text on the image.
- 2.7. The participant's identity must not appear on any part of their entry. For identification purposes, only the participant's assigned number will be written on the final output.
- 2.8. One (1) output photo must be submitted to the head of the sub-event within 15 minutes after the sub-event, inclusive of a title and a one-sentence caption relevant to the theme.





# MECHANICS PHOTOJOURNALISM



2.9. Photo printing will be shouldered by the organization.

2.10. All entries will be evaluated using the following criteria:

Criteria	Percentage
Visual Impact	40%
Artistic Quality	20%
Creativity and Originality	20%
Relevance to the Theme	20%
<b>TOTAL</b>	<b>100%</b>

2.11. The event points acquired by the team for the Photojournalism event will be the average scores given by the judges.



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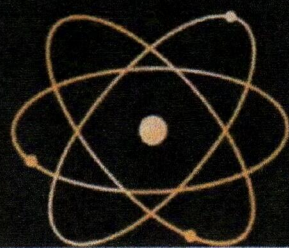
@PHYSIKALIKnayan



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# MECHANICS FEATURE WRITING



*The LIKNAYAN 2020: Feature Writing* is an inter-school feature writing contest for Grade 9 and 10 Junior high school students that aims to promote appreciation of science and technology by raising the interests and enthusiasm of readers through in-depth stories about latest developments in the fields of Physics and Applied Physics.

## 1. General Guidelines

- 1.1. The participants should provide their own pens to be used for the contest. Only pens with black or blue ink will be accepted. Erasable pens are strictly prohibited.
- 1.2. Entries shall only be written on the paper provided by the organizers.
- 1.3. Only the participating students and authorized personnel will be allowed to enter the designated venue for the feature writing.
- 1.4. Participants must abide by the ethical rules of journalism.
- 1.5. Use of electronic devices, books, and the like is strictly prohibited.
- 1.6. Participants will have their own designated workspace.
- 1.7. The panel of judges will be composed of professionals in the fields of Physics and Applied Physics, Journalism, and Writing.
- 1.8. The decision of the panel of judges is final and irrevocable.
- 1.9. Winning entries will be included in Kalasag, the official publication of PHYSIKA, UP Applied Physics Society.
- 1.10. All entries submitted to the contest organizers will become property of PHYSIKA, UP Applied Physics Society.

## 2. Contest Mechanics

- 2.1. Participants will be given two (2) hours to compose their entries.
- 2.2. Entries must not have been previously published, and all participants must ensure the originality of their works.
- 2.3. The entries must be written in English with 500 to 1000 words. Failure to comply merits deductions.
- 2.4. The participant's identity must not appear on any part of their entry. For identification purposes, only the participant's assigned number will be written on the final output.
- 2.5. A theme will be given at the start of the sub-event, to which their entries will be in line with.
- 2.6. Fact sheets will be provided. However, participants are not limited to the information contained on the sheets.
- 2.7. After the allotted time, the participants must submit their entries to the event organizers for judging.



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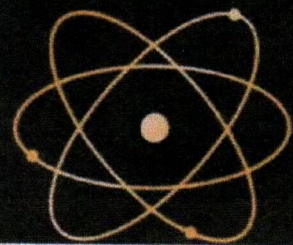
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# MECHANICS FEATURE WRITING



2.8. None of the judges will see any of the participant's name until the winners are chosen.

2.9. The judges will score the participants based on the given rubric below.

Criteria	Percentage
Content	30%
Organization/Structure	20%
Language and Grammar	20%
Impact and Relevance	20%
Originality	10%
TOTAL	100%

2.10. In case of a tie breaker, the judges will deliberate who will rank higher and lower based on their entries. The participant's identity must not appear on any part of their entry. For identification purposes, only the participant's assigned number will be written on the final output.

2.11. The sub-event points of the team for the Feature Writing will be the average scores coming from the three judges.



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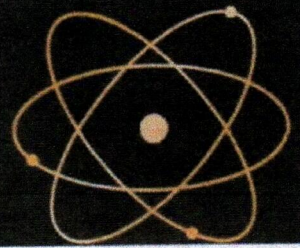
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# MECHANICS SCIENCE INVESTIGATORY PROJECT



2.6. Two parameters will be graded by the judges and the random people:

a. Poster Design

Criteria	Percentage
Layout	30%
Neatness	20%
Readability	20%
Impact and Relevance	20%
Originality	10%
TOTAL	100%

b. Poster Writeup

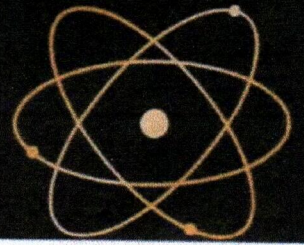
Criteria	Percentage
Content	30%
Organization/Structure	20%
Language and Grammar	20%
Impact and Relevance	20%
Originality	10%
TOTAL	100%

2.7. Total points comprise of 60% of the Poster Content Points, and 40% of Poster Design Points.





# APHY TALK



*The LIKNAYAN 2020: APHY Talk* is a seminar for all that aims to promote and showcase different fields of research in Physics and Applied Physics to the public. This, in turn, makes the world of academia much accessible to the masses. The talk will be composed of at least three speakers from the field of Physics and Applied Physics or any other related field. The speakers will be presenting their profession, field of study, or research on the event proper. APHY Talk will be open to all those who are interested to participate in this event.

