UNIVERSITY OF THE PHILIPPINES LOS BAÑOS
MATHEMATICAL SCIENCES SOCIETY

2nd Floor, Francisco O. Santos Hall, University of the Philippines Los Baños, College, Laguna 4031
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August 23, 2019

DR. CARLITO D. ROCAFORT
Regional Director, Region IV-A
Department of Education

RE: Endorsement for 32nd Southern Tagalog Invitational Mathematical Challenge to Secondary Schools in Region IV-A

Dear Dr. Rocafort:

Peace be with you!

We are the **UPLB Mathematical Sciences Society (UPLB MASS)**, a duly recognized academic organization in the University of the Philippines Los Baños (UPLB). In our 45 years of existence, we have been committed in fulfilling our aspiration of promoting deeper appreciation and wider application of mathematical sciences through involvement with our university constituents and the Filipino masses.

In line with this objective, we will be holding the **31st Mathematical Sciences Week** with the theme of "**Smart Solutions: Enhancing Risk Reduction Management to Build a more Disaster-Resilient Nation**" on October **14-18, 2019.** During this week, we will be conducting the following:

1. 32nd Southern Tagalog Invitational Mathematical Challenge (MATHEMATCH)
    -   A quiz contest for secondary school students from Region IV
2. Exhibits and Demonstrations
    -   A week-long free exhibit to showcase the concepts and applications of this year's theme, and posting of mind-twisting puzzles
3. Poster Making
    -   A contest that may be joined by all MATHEMATCH participating schools where contestants express their creativity in integrating the underlying mathematical concepts in this year's theme
4. Teachers' Seminar
    -   A seminar for the teachers and coaches of the MATHEMATCH participants
5. Research Convention
    -   A contest that may be joined by all MATHEMATCH participating schools where contestants showcase their innovative ideas and studies related to this year's theme
6. 46th Annual Search for the UPLB Math Wizard (for UPLB students only)

In this regard, we would like to ask your good office for endorsement of our MATHEMATCH to the secondary schools in Region IV-A. Annually, we have been gathering around 60 school participants. This year, we would like to reach into more schools and we believe that with your help, our goal would be realized. For your perusal, attached are a more detailed description of the project and the mechanics of the contest.

Thank you for reading, and we are very much hoping for your positive response.
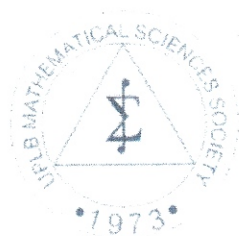
Sincerely yours,

ROJHUN O. MACALINAO
Vice President for Scholastics Division

ROGINA MAE O. ESPIGA
President

Recommending Approval:

MS. SIENA CATHERINE A. MARANAN
Junior Adviser

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ORGANIZATIONAL BACKGROUND

UPLB Mathematical Sciences Society was established in 1973 and has been one of the duly recognized academic organizations in the University of the Philippines Los Baños since then. It comprises of BS Applied Mathematics, BS Computer Science, BS Mathematics, BS Mathematics and Science Teaching Major in Math, and BS Statistics students who commit to uphold the goal of the society of contributing to the development of the Filipino nation by cultivating deeper appreciation and wider application of mathematical sciences, by fostering academic excellence towards social relevance and by becoming involved with the rest of the university constituency and with the Filipino masses.

CONTACT INFORMATION

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31st MATHEMATICAL SCIENCES WEEK

I.   **Schedule of Activities**

October 14, 2019 (Monday)
7:00 A.M. – 9:00 A.M.   Registration

9:00 A.M. – 11:00 A.M.   MATHEMATCH Preliminary Round

Poster Making Contest

Teacher's Seminar

Research Convention

1:00 P.M. – 5:00 P.M.   MATHEMATCH Final Round

October 15, 2019 (Tuesday)
10:00 A.M.   Opening of Exhibit

7:00 P.M. – 10:00 P.M.   Unleash IT!: Python Workshop

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<u>October 16, 2019 (Wednesday)</u>
7:00 P.M. – 10:00 P.M.　　　　Math Wizard Elimination Round

<u>October 17, 2019 (Thursday)</u>
7:00 P.M. – 10:00 P.M.　　　　Math Wizard Final Round

II.　32nd Southern Tagalog Invitational Mathematical Challenge

Students from any secondary school (private or public) within Southern Tagalog Region (REGION IV – A and REGION IV – B) are qualified to join the contest. Each school must be represented by at most two teams, which will be composed of three students each. The well-screened questions will cover topics in Logic, Arithmetic, Algebra, Geometry, Trigonometry, Calculus, and Statistics. The said questions are verified by UPLB Mathematics Professors who will serve as judges in the final round. There will be a closed-door preliminary examination where the participants will be given an individual exam. The accumulated scores of the three individual contestants will be considered as the team's score and will serve as basis for qualifying in the final round. The top fifteen (15) teams based on their team scores qualify for the final round. The final round will start at 1:00 P.M. and will be open for public viewing. Whoever gets the highest score among the fifteen (15) finalists shall be declared as the winner.

General Mechanics:

- Contestants will be allowed to solve a question only after the quizmaster says, "Time starts now." If a team violates this rule, warning flags will be raised to prompt the quizmaster to warn the concerned team. For the second and subsequent violations of this rule by a team, warning flags will be raised again and the team will be disqualified to answer the question when the violation was committed. The number of violations of every team will be reset to zero (0) after each round.
- Clarifications from the contestants will be acknowledged only after the correct answer for that question has been given by the quizmaster. The assigned proctor shall raise his/her hand and a team representative may politely raise his/her clarification to the judges. **The judges' decision is final and irrevocable.**
- In case of ties after the three rounds, tiebreaker questions will be asked until one of the teams makes a point over the other.

Round Mechanics:

- Preliminary Round
  - ❖ A closed-door preliminary written examination will be given from 9 A.M. to 11 A.M. on October 15.
  - ❖ The exam shall be taken individually. The accumulated scores of the three contestants will be the basis for qualifying in the final round.

- Final Round
  - ❖ Easy Round
    - Ten (10) questions will be asked.
    - Each team will be given thirty(30) seconds to answer each question.
    - A correct answer gains 5 points. A wrong answer gets a deduction of 2 points and a no answer gets a zero (0).

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❖ Average Round
   ▪ Seven (7) questions will be asked.
   ▪ Each contestant will be given ninety (60) seconds to answer each question.
   ▪ A correct answer gains 10 points. A wrong answer gets a deduction of 3 points and a no answer gets no point deduction.
❖ Difficult Round
   ▪ Five (5) questions will be asked.
   ▪ Each contestant will be given ninety (90) seconds to answer each question. All teams will be designated a buzzer which they will press once they have finished answering.
   ▪ The first team to get the correct answer gets 25 points, the second gets 20 points, the third gets 15 points and the rest gets 10 points each. A wrong answer gets a deduction of 5 points and no answer gets a deduction of 3 points

Scores in the Easy, Average and Difficult Round will be accumulated to determine the winner.

Prizes:

- Each participating school will receive a certificate of participation and each participating student will receive souvenirs.
- The highest scorer in the preliminary round will be given a medal and a certificate of recognition. Prizes for the top three (3) teams are as follows:

First Place: .... 1 Trophy, 3 Gold Medals, Certificates of Recognition, and PhP 15,000 cash

Second Place: .... 1 Trophy, 3 Silver Medals, Certificates of Recognition, and PhP 7,000 cash

Third Place: ....1 Trophy, 3 Bronze Medals, Certificates of Recognition, and PhP 5,000 cash

- Other participants included in the final round will each receive a medal.

III.   Theme Exhibit
Annually, we zealously search the best theme for the Mathematical Sciences Week. For us to showcase the theme's concepts and applications, we provide a week-long free exhibit. We also provide mind twisting puzzles – Puzzle of the Week and Puzzle of the Day – to be answered by any non-member of our organization.

IV.   Poster Making Contest
All participating schools in MATHEMATCH may also participate in the poster-making contest. Contestants are to express their creativity in integrating the underlying mathematical concepts in this year's theme.

Requirements:
- All entries must be drawn using oil pastel only. Each contestant must provide his/her own oil pastel.
- All entries must be on a 1/8 illustration board to be provided by UPLB MASS.

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Contest Proper:

- The contest will be conducted simultaneously with MATHEMATCH's preliminary round, which is on October 14, 2019 from 9am to 11am.
- Contestants will be given a maximum of two hours to finish their entries.
- UPLB MASS shall have the rights to post and include the entries in the MathSci Exhibit at the Math Building Lobby.

Criteria for Judging:

Entries will be judged using the following criteria:

Originality	15%
Style	15%
Content	30%
Relation to Theme	40%

Announcement of Winner:

- Winners will be announced during the awarding ceremony of the winners of MATHEMATCH.
- The Grand Prize winner will receive a gold medal, a certificate of recognition, and cash prize.

V.   Research Contest

All participating schools in MATHEMATCH may also participate in the research contest to showcase their innovative ideas in relation to this year's theme. A team may be composed of at most 2 members, a student of any grade/year level and a mentor from the same school. Interested participants will send softcopies of all powerpoints and written presentations on or before September 20, 2019 for the initial screening. Top 8 schools will be sent a notice on October 1, 2019 to present their paper on October 14, 2019.

Criteria for Initial Screening of Written Presentation:

Relation to theme	15 points
Clarity	15 points
Structure and Writing	15 points
Originality	15 points

Contest Proper:

- The contest will be conducted simultaneously with MATHEMATCH's preliminary round, which is on October 14, 2019 from 9am to 11am.
- Each presentation must not exceed 5 minutes. The moderator will inform to start the presentation with a green bulb. On the 3rd minute, a yellow bulb will be lit. On the 5th minute, a red bulb will be switched on and the moderator will advise the presenter to end he presentation.

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- Each of the judge will be allowed to give comments and ask questions to the presenters for 5 minutes.

Criteria for Assessing Oral Research Presentation

Organization of contents	10 points
Poster Display	10 points
Answers to Questions	10 points
Delivery	10 points

Awards and Prizes:
- Winners will be announced during the awarding ceremony of the winners of MATHEMATCH.
- The Grand Prize winner will receive a gold medal, a certificate of recognition, and cash prize
- Special awards will be given to the Best Presenter, Best Poster Display, and Best paper.
- Edited full paper of the champion will be compiled and presented at the UPLB Mathematical Sciences Society newsletter. Principal authors will retain the copyrights of full-text submissions

VII.   Teachers' Seminar
While participating students are taking the written preliminary examination in the MATHEMATCH, their teachers and coaches may attend a seminar. We select speakers who are expert in the field of Mathematics. A certificate of attendance will be given to each participant of the seminar.

VIII.   45th Annual Search for UPLB Math Wizard (for UPLB students only)
Any bona fide UPLB student may join this prestigious event. The well-screened questions will cover topics in Algebra, Calculus, Geometry, Statistics, and Trigonometry. The said questions are verified by UPLB Mathematics Professors who will be serving a judges in the final round. There will be a closed-door Elimination Round. In this round, the participants will be given an individual exam. The top fifteen (15) scorers of the preliminary examination will qualify for the final round. Whoever gets the highest score among the fifteen (15) finalists shall be declared as the UPLB Math Wizard 2019.

The following prizes will be given:

- Each participant will receive a certificate for his participation in the said event.
- The highest scorer in the elimination round will be given a medal.
- The 45th UPLB Math Wizard will receive a trophy, a medal, a cool shirt and Cash Prize.
- Other participants included in the final round will each receive a medal.