



Title of Proposal Windsor-Essex County Regional Mathematics Olympiad

Contact information

*The one person and place to
Communicate with the applicant(s).*

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Summary *Less than 100 words* Total amount requested in this competition \$

The University of Windsor and SWOAME (Southwestern Ontario Association of Mathematics Educators) propose to host an annual regional mathematics contest for grades seven and eight students. 100 participants will be invited to the University of Windsor, based upon performance in a selection contest, where they will compete in individual, pairs, and group events. The top eight students will represent Windsor-Essex County at the Ontario Mathematics Olympiad. Students and faculty members from the Faculty of Education and the Department of Mathematics and educators from regional school boards will collaborate to prepare and organize the competition and train the students.

Applicants

Put any specific information on the relevant experience or expertise of an applicant in "Other".

Name(s)	Frank DiPietro	Dragana Martinovic	Justin Lariviere	Wai Ling Yee
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Position	Curriculum coordinator, SWOAME President	Assistant Professor	Director, Mathematics and Statistics Learning Centre	Assistant Professor
Employer	Windsor Essex Catholic DSB	University of Windsor	University of Windsor	
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CMS member number

002794

Current
Grants

CCL Principal
co-investigator, Women
Grant U Windsor

NSERC Discovery Grant, NSERC UFA

What you propose to do

Times Roman 12 pt, 1" margins, at most 40 lines

Last year, the University of Windsor and the Southwestern Ontario Association of Mathematics Educators began an annual tradition of promoting mathematics to grades seven and eight students and encouraging interaction between mathematicians and educators through hosting a regional mathematics competition. The organizing committee consisted of faculty members from the Faculty of Education and the Department of Mathematics, the president of SWOAME, an elementary school teacher, and four students from the Faculty of Education's concurrent and consecutive programme.

Format of the competition: Sixty students were invited to compete at the university last year on the basis of results from a selection contest administered at each school in the region and written by over 300 students. The students were placed in gender and grade balanced pairs and teams of four. The students were also encouraged to meet and interact with students from different schools.

The contest consisted of an individual, pairs, and team competition followed by lunch, mathematical entertainment, and an awards ceremony. The students worked on a variety of problems, from those based on manipulatives such as Tangram kits to those testing creative problem solving ability. Tables were covered with large sheets of blank paper to encourage discussion amongst the students.

The top sixteen students from the individual competition were selected to form Windsor-Essex County's two teams and an alternate team for the Ontario Math Olympiad. Several organizers held five evening training sessions where the students studied topics such as number theory and geometry at a greater depth than the normal classroom environment permits. [Parents were encouraged to be involved in the education process by attending training sessions and watching the teams compete at the University of Ottawa]

We hope that we inspired the students to continue to explore mathematics and that the presence of two women with Ph.D.s provided the female students with positive role models.

Because university faculty members, elementary school educators, and pre-service intermediate-senior teacher candidates collaborate to realize the competition (contest design, grading, supervising students, etc.), our event satisfies the CMS goal of supporting the advancement of mathematics education through joint projects with mathematics educators at all levels. Our activities also meet the objective of promoting and increasing understanding of mathematics and providing extra-curricular opportunities for students.

Last year, we were able to meet the financial requirements of hosting the competition largely due to generous donations from the Faculty of Education, the Faculty of Science, regional boards of education and SWOAME. We seek funding from the CMS in hope of making this competition an annual tradition.

Our intent is to improve the selection process of contestants for the Regional Olympiad, by merging several mathematics-related initiatives presently conducted by the Faculty of Education professors in the school boards. By doing so, we will include even more individuals in the organization of the event and use promotional and fun activities (e.g., math scavenger hunt) to increase the pool of schools involved in the selection process.

Budget

Description	Revenue		
University of Windsor, Faculty of Education	500	500	500
University of Windsor, Faculty of Science	500	500	500
Windsor Essex Catholic DSB	1000	1000	1000
Greater Essex County DSB	1000	1000	1000
CMS Endowment Grant requested	3000	3000	3000
Total Revenue \$	6000	6000	6000

Expenses			
Selection of participant in the Regional Olympiad (materials)	1000	1000	1000
Photocopying and printing of letters and handouts	500	500	500
Prizes (books, puzzles, trophies, certificates)	1000	1000	1000
Refreshments (lunch for participants, food during judge training)	1500	1500	1500
Transportation to the OMO (cost varies according to location)	1200	2500	2500
Meals and accommodation during the OMO (for 10 people)	3000	3000	3000
Total Expenses \$	8200	9500	9500

Other

Funding, partners, revenue potential, information on applicants such as publications or awards, at most 20 lines.

We plan to approach the Faculty of Engineering, the bank with which the university is partnered, and local companies such as Chrysler, GM, and Ford and for additional funds.

Mr. F. Di Pietro's responsibilities include: training new teaching staff for the board, implementing new and revised Ministry of Education curriculum and policies, supporting the Mathematics, Science and Technology Councils. He also is serving as the president of local chapter (SWOAME) of the OAME and coordinated the Ontario Math Olympics activities.

As Undergraduate Advisor and Director of the Mathematics and Statistics Learning Centre, Mr. Lariviere's main responsibility is to oversee undergraduate education in mathematics at the University of Windsor. He has more contact with students than any other mathematics faculty.

In her research, Dr. Martinovic explores computer applications in education to conceptualize interdisciplinary theories. She also investigates issues in student modeling based on captured relevant student information, tutorial dialogue in mathematics, as well as privacy issues in personalized learning systems. She is a member of numerous professional groups and organizations, including the Math Ed Forum of the Fields Institute. In the summer 2007 she gave a workshop on Mathematics Logic and Computer Mathematics to the participants of the CMS Math Camp at the Brock University.

Dr. Yee hosts an undergraduate competition, the Putnam Competition, and the International Tournament of the Towns for grades 7-12 students at the University of Windsor. She was a house parent and lecturer at the 1998-2000 and 2003 CMS/ESSO National Math Camps. She meets regularly with high school students, complementing nationally recognized educator Bruce White's night math sessions with lectures and problem sets based upon national-level math Olympiads.

Project start date: 2007

Project finish date: 2010