Instructionally Related Activities Funds Request Fall 2018

▾ Submitter

Submitter Name

Brian Thoms

Submitter Email

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▾ 1. Basic Details

Activity Title

ACM Intercollegiate Programming Contest

Activity/Event Date

November 10, 2018

Date Funding Needed By

September 1, 2018

Previously Funded?

○ No

● Yes

▾ Previously Funded Proposal

Semester/Year

Fall / 2017

Proposal # (if known)

922

Report submitted for previously Funded Activity?

○ No

● Yes

Please upload a copy of the report

ira-report-form-922.docx

Additional Report #1

ira-report-form-718.docx

Additional Report #2

ira-report-form-670.docx

Additional Report #3

ira-report-form-806.docx

Additional Proposers

Academic Program(s)/Center Name(s)

Computer Science

Estimated total Course Fee revenue

N/A

Amount Requested from IRA

4150

Estimated Number of Students Participating

15

▼ 2. Brief Activity Description

Describe the activity and its relationships to the educational objectives of the students' program or major

Brief Activity Description

ICPC is categorized as a multi-tier, team-based, programming competition and involves a global network of universities hosting regional competitions that advance teams to the ACM-ICPC World Finals. Since it began in 1970, the contest has grown to include tens of thousands of students and faculty in computing disciplines from over 2,000 universities from over 91 countries. The contest fosters creativity, teamwork, and innovation in building software programs, and challenges students' ability to perform within a competitive environment.

The competition involves teams of three students, sharing one computer and trying to solve 10 highly challenging programming problems within a five hour time-window. Many teams practice well in advance of the competition, honing up on mathematical algorithms and practicing software programming techniques. These activities not only strengthen their programming skills but also enhance project-based skills such as teamwork and collaboration.

Each year, CI competes in the Southern California Regional, which takes place at Riverside Community College. ATRCC, students compete against peers from local institutions including, but not limited to UCLA, UCSD, UCSB, USC, CalTech, HarveyMudd and CSULB. In 2017,CI students bested their 2016 performance. CI-v1.0 managed to finish in the top 10, which is a truly remarkable result and a new school record!

CI students (and faculty) look forward to this event every year and strive to continue a tradition of strong performances. IRA funds are the primary reason we can take as many students as we do.

▼ 3. Learning Outcomes and Relation of IRA to Course Offerings

All IRAs must be integrally related to the formal instructional offerings of the University and must be associated with scheduled credit courses.

1. Please list all classes that directly relate to the proposed activity.
2. For each class listed, describe in detail how exactly the IRA activity will be integrated with the class's activities, how often/ on what expected date(s), and to what extent

Learning Outcomes and Relation of IRA to Course Offerings

Computer programming is a fundamental skill that is taught in numerous Computer Science and Information Technology courses. At the ACM International Collegiate Programming Contest (ICPC), students are able to showcase their skills learned in the classroom, in a challenging real- world, competitive setting. As such, the following courses are aligned with this activity:

COMP105 Introduction to Computer Science and Programming,
COMP150 Introduction to Object-Oriented Programming,
COMP151 Algorithms and Data Structures,
COMP232 Programming Languages,
COMP350 Software Engineering,
COMP351 Distributed Computing,
COMP450 Advanced Object-Oriented Programming.

Additionally, software engineering is becoming increasingly collaborative and participation in the ICPC allows groups of students to work in teams of three to try and solve six highly challenging programming problems within a five hour time-window. Many teams practice well in advance of the competition, honing up on mathematical algorithms and practicing software programming techniques. These activities not only strengthen their programming skills but also enhance

project-based skills such as teamwork and collaboration. Lastly, in the weeks leading up to the competition, teams practice and prepare with the support of their contest coach, Dr. Thoms, and co-coach Nick Stern, who will hold contest study sessions and distribute practice problem sets and educational material.

4. Activity Assessment

Describe the assessment process and measures that the program will use to determine if it has attained its educational goals. **Please note that a report will be due at the end of the semester.**

Description of Assessment Process

While the final placement of our teams at the competition is not a good metric for measuring the success of the activity, CI should be proud of their achievements in past events and use these results as a baseline for future accomplishments. In the 2017 contest, four out of the five participating teams managed to solve at least one challenging computer programming problem. Additionally, student feedback will play an important role in helping to identify various successes and failures of the activity.

5. Activity Budget

Please enclose a complete detailed budget of the entire activity. Indicate specific items that you are requesting IRA to fund.

You should use either the Regular Activity budget (for events on campus) or -- if your event involves any travel-- you MUST use the IRA Travel Budget Form.

You can download both of the IRA Excel Budget sheets at http://www.csuci.edu/ira/application.htm.

Activity Budget
travelbudget030118.xlsx

6. International Trips

If your event is an international trip submitted through the Center for International Affairs, you must include copies of:

1. Complete Center for International Affairs/ UNIV 392 proposal
2. The program budget as submitted to the Center for International Affairs (to ensure congruency between the two budgets)
3. as well as a copy of the course syllabus

Center for International Affairs Budget

Copy of Center for International Affairs Proposal

Course Syllabus

Certification

☐ I certify that students attending this trip are not previous or repeat attendees of a prior International UNIV 392 Trip

▼ 7. Sources of Activity Support

Please list the other sources of funding (including course fees), and exact expected amounts of additional support for the activity. Please indicate if there are no other sources of funding

Other Sources of Funding

Right now, IRA funding is the primary source of funding for this event.

▼ 8. Promoting Participation

What is your intended audience and how do you intend to market this to your students?

The intended audience will be students majoring or minoring in computer science and information technology, but the event is open to all students with an aptitude for computer programming. In the past, the event has been marketed by Computer Science Faculty, the Computer Science Club, the Women in Computing Club and the Computer Science Listserv.

If this is an event that is off campus, how do you plan to bring back the benefit of this event to campus?

The results of the competition are well publicized by student clubs and faculty. Additionally, ACM provides results online: http://www.socalcontest.org/current/index.shtml,

Finally, each year, I send out an email update and include a blog post on the department's website. Last year's results can be found here: https://compsci.csuci.edu/about/news-and-events/acm-programming-results2017.htm .

▼ 9. Sustainability

If appropriate, indicate how the content or delivery of the project promotes sustainability at CI.

Sustainability

Carpooling students to the event is important.

Additionally, educational materials purchased are made available to future event participants.

▼ 10. Approval and Acknowledgement

Program Chair/Director

Soltys, Michael

Dean

Adler, Mary

Conditions and Considerations

☐ **Artist/Performer/Speaker Fees & Honoraria**: On the Activity Budget, please indicate whether the vendor's price was set by you/CI Representative, or is a fee that was set by the vendor.

☐ **Large Event**: For a large event, consultation with the campus Event Coordinator's office at (805)437-8548 is required.

☑ **Field Trip**: Sponsor must comply with all policies found at:
http://www.csuci.edu/rm/programs/academic-field-trip-guidelines-and-forms.htm. If approved, Identified Risks of Participation and Release Agreement must be submitted for each student to the Program Office (Public Folders-HR Forms).

☐ **Involves Human Subject Data Collection for Public Dissemination -Requires IRB Approval** : If Project Sponsor

proposes to conduct research with human participants, the proposal may be subject to Institutional Review Board for the Protection of Human Subjects (IRB) review. All research that involves any type of interaction with human subjects - from simple surveys to complex biomedical procedures - must be reviewed and approved by the IRB prior to starting the research. Data for "Public Dissemination" indicates interviews/surveys that result in a journal/poster session/newsletter, etc.

☐ **IT Requirements**: If your activity has IT requirements, coordination with and approval from IT Administration is required.

☐ **International Travel**: Requires International Travel application be submitted to Center for International Affairs. Include copy of CIA budget and course syllabus in your IRA application. Must utilize the University's Foreign Travel Insurance Program (FTIP) and follow all International Travel Guidelines listed at: http://www.csuci.edu/rm/insurance/foreign-travel.htm

☐ **Risk Management Consultation**: Events that involve or engage students directly with a performer or artist (i.e. in a workshop or other than as a passive audience member) will require consultation with Risk Management. Requires proof of correspondence with Risk Management.

☐ **Space/Facilities Services Requirements**: Consultation and coordination with Facilities Services is required.

Acknowledgement

☑ I acknowledge that I have reviewed and accepted the Conditions and Considerations herein. Please check off boxes as appropriate.

Chair Review

Recommendation

● I recommend approval of the IRA Funds Request described on this page

○ I DO NOT recommend approval of the IRA Funds Request described on this page

Comments

We have been doing better and better each year, it is an exciting opportunity for our students, and a nice way to advertise CI.

✎ Michael Soltys-Kulinicz   Mar 1 2018

Dean Review

Recommendation

● I recommend approval of the IRA Funds Request described on this page

○ I DO NOT recommend approval of the IRA Funds Request described on this page

Comments

✎ Marion Adler   Mar 2 2018