

SIGPLAN Education Board

<http://wp.acm.org/sigplanelducationboard/>

Dan Grossman, chair

Current focus: Very active participation in the once-a-decade effort to update the standard **ACM/IEEE Computer Science Curriculum**, which includes “core” and “elective” material on programming languages and language translation.

Background and Prior Results

- SIGPLAN Education Board created April 2009
- “Charter” goals:
 - Promote the quality of programming-languages education, with a particular focus on undergraduate curricula
 - Provide a forum for discussions of issues related to programming languages education
 - Engage and represent the SIGPLAN community in activities related to education
 - Interact with other groups, particularly those that develop curriculum standards
 - Develop documents, guidelines, examples, and other resources
- Developed “*Why Undergraduates Should Learn the Principles of Programming Languages*” white paper for non-PL audience

Curriculum 2013: Big Picture

<http://cs2013.org/>

- First major revision of ACM/IEEE standard curriculum since 2001
 - PL community was very unhappy with 2001’s treatment of PL
- The standard has large-if-indirect impact
 - New programs, textbook authors, program assessment, much more
- Written by 17-person steering committee drawing in other experts and soliciting public feedback
- First public draft later in 2011

Curriculum 2013 Panel / Information Session (FCRC wide)

Wednesday, 6:00-7:00PM, Room C2/C3

Please attend!

- Learn about the overall effort
- Share PLDI perspective

Curriculum 2013: PL Status

- SIGPLAN officers Kathleen Fisher and Dan Grossman are on the steering committee
- The PL subcommittee *is* almost entirely the SIGPLAN Education Board
 - **Would also like to add some experts on teaching modern compilers courses**
- “Core” material: draft almost done
 - Functional programming, OOP, Event-driven, static & dynamic typing, basics of language translation, program representation
 - Other subcommittees cover programming fundamentals, software engineering, etc.
- In progress: elective material on “PL” (semantics, advanced constructs, ...) and “compilers” (including program analysis and run-time systems)
- End result: a 1-2 page outline of topics *with learning outcomes* and pointers to example courses

SIGPLAN Education Board Members

- Kim Bruce, Pomona College
- Curtis Clifton, Rose Hulman Institute of Technology
- Kathi Fisler, Worcester Polytechnic Institute
- Stephen Freund, Williams College
- Dan Grossman, University of Washington
- Matthew Hertz, Canisius College
- Johan Jeuring, Utrecht University
- Doug Lea, State University of New York at Oswego
- Simon Thompson, University of Kent

What You Can Do

- Attend Wednesday’s information session
- Subscribe to the SIGPLAN Education Board blog RSS feed
 - **So you know about opportunities for public feedback on Curriculum 2013**
- Make the board (and our blog) aware of relevant events (panels, workshops, etc.) on PL education
- Other?