Encouraging modifications on graduate education

Huaxiang Fu

Department of Physics, University of Arkansas, Fayetteville, Arkansas 72701, USA

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Abstract

Graduate education is a key component of the departmental education effort. Facing the declining number of students, the department has experimented and adopted a number of methods to improve the results. These include (1) a new approach for recruiting, by building a long term relationship with neighboring universities and colleges, and by forming special recruiting committee, (2) use of a new model for candidacy examination, (3) revising curriculum for core courses, in particularly, by adding a section to improve students’ problem solving skills, (4) providing one semester research rotation, in which students choose to work with three professors to gain research experience before they identify advisors, and to find out the scientific research that they are interested in, (5) establishing fellowships to encourage good students to perform well in courses and in conducting research, (6) conducting annual evaluation of students’ research progress, in which each student is evaluated by individual committee, (7) hiring new faculty members on key research areas such biophysics and materials science, (8) survey and feedback provided by former students on what need be improved on graduate education.