Research Opportunities for Top PSTAT Undergraduates for 2017-18

To provide research opportunities for our majors, PSTAT 296A-B, Research Projects in Actuarial Science, is now open to top undergraduates in Actuarial Science, FMS and Statistical Science majors! We invite top seniors from all PSTAT majors to apply. Admission is competitive and not guaranteed.

In the PSTAT 296A-B course sequence, students work on team research projects under supervision of PSTAT faculty members and in coordination with industry sponsors. All projects are of interest to the insurance industry; 2017-18 project areas are healthcare (of interest to actuaries and statistics students), systemic risk (of interest to actuaries and FMS students) and Property & Casualty insurance (of interest to actuaries). Previous PSTAT 296A-B projects employed such statistical methodologies as clustering, regression (including GLMs and logistic), time series, distribution fitting, simulation, etc. Students also get training in scientific writing, presentation skills, realistic data analysis, R programming, and group teamwork.

**Application requirements:** Students accepted into the five-year combined BS/MS in Actuarial Science program are guaranteed places in the class. Undergraduate students in actuarial science, FMS and statistics are accepted on a competitive basis. PSTAT 296AB can count as an elective or as a substitute for one of the required PSTAT courses. As a graduate course, PSTAT 296AB automatically gives honors units. Students pursuing the MA in Applied Statistics should not apply.

Undergraduate students should have a minimum overall GPA of 3.4, senior status, and A’s in courses relevant to the project areas of interest. For healthcare and P&C projects, the most relevant courses are in applied statistics; for systemic risk projects the most important courses are PSTAT 160A-B, 170, 176. Students are not expected to have taken all these classes; a reasonable subset is sufficient.

**Course structure:** Students will work in teams of three for six months in the Fall 2017 and Winter 2018 quarters under supervision of a faculty member, and are required to produce a written project report and a poster for their project. Note that **the commitment must be for 2 quarters (Fall and Winter). Students are also expected to present their results (poster) at UCSB’s Undergraduate Research Colloquium (URCA) in May 2018.**

Typically, students meet with their faculty supervisor once a week to discuss results and directions for future work, but most of the work is done by student teams on their own.

**If you are not good at independent work, or do not like team work, or are unable to responsibly schedule time for a large, long-term project, do not apply!**

To substitute PSTAT 296A-B for a required PSTAT course, please discuss the option with Prof. Feldman, the PSTAT UG Advisor.

**Application process:** Please complete the following form and leave a printed copy in Prof. Feldman’s mailbox by **June 8, 2017**. Because admission to the course is contingent on various factors, including the number of applications, each undergraduate applicant should enroll in a “back-up” course that can be dropped if admitted to PSTAT 296A.
Application to enroll into PSTAT 296A-B, 2017-2018

Name: _______________________________ Perm #: __________________

E-Mail (please give an e-mail address you check regularly, including in summer):
_____________________________________________________________

Local Phone: ___________________________ Permanent Phone: ____________

Status/Units Completed: ________________

Expected Year/Quarter of Graduation: _________________

Major(s): ______________________________ Minor(s): _________________

Career goals after UCSB: ____________________________________________
________________________________________________________________________

Topic of interest (healthcare, P&C, statistics, financial math; you may include more than one):
________________________________________________________________________
________________________________________________________________________

Course schedule planned for coming year; explain how PSTAT 296A-B fits into it:

Fall: ________________________________________________________________
Winter: __________________________________________________________________
Spring: __________________________________________________________________

Grades in the following PSTAT courses (write N/A if not taken a course):

120A____ 120B____ 120C____ 126____ 174/274(circle one)____ 131/231(circle one)____
160A____ 160B____ 172A____ 172B____ 170____ 176/276(circle one)____ 194____

Writing skills (e.g., list writing courses with grades) _________________________________

Programming skills: _______________________________________________________

SOA Exams passed, include the date: __________________________________________

Additional information (UD Math/CS courses, internships and jobs held, research experience, etc.):
______________________________________________________________
________________________________________________________________________
________________________________________________________________________

Please submit a printed copy of this application form to Prof. Feldman by June 8, 2017
(Leaving the form in her mailbox is OK)