ABOUT UCSB CROSSROADS

Since 2012, UCSB Crossroads has been providing funding and support for interdisciplinary research and teaching on campus. Now with additional funding from the NSF and with robust teaching support for graduate fellows, we are looking forward to drawing in a new round of interdisciplinary research collaborations—to stimulate discourse and intellectual discovery across academic fields, and to share those learning experiences with our undergraduate population.
INTRODUCTION

UCSB Crossroads provides doctoral students with a year-long interdisciplinary research experience that then extends into the undergraduate or professional masters classroom through curriculum development and closely mentored teaching. UCSB Crossroads encourages and supports multiple intersections: across disciplines; between research and teaching; among faculty members, graduate students, and undergraduates. The program is sponsored by the UCSB Graduate Division, with support from the Office of Research, the Office of Instructional Development, the Deans of the College of Letters and Science, the College of Engineering, the Gevirtz Graduate School of Education, and the Bren School of Environmental Science and Management, with additional funding from the National Science Foundation.

The central idea behind UCSB Crossroads is that faculty members and doctoral students collaborate on one or more year-long research projects through a team-taught graduate seminar; that research is then translated into the undergraduate classroom (or, for appropriate fields, the professional Master’s classroom). The doctoral Fellows gain practice in interdisciplinary collaboration and learn to bring research and (inter)disciplinary perspectives into their teaching. Thus, one goal of the Crossroads program is to enhance undergraduate learning by infusing first-hand research into the curriculum. Another is to use the creation of classes taught by faculty and graduate students from different disciplines as an opportunity for students to recognize the foci of disciplines – what questions they ask, the evidence or data they collect, the methods they use for analysis, and the ways that findings are represented. Together, these foci are intended to help the undergraduate students in courses taught by Crossroads Fellows to develop a metacognitive framework for learning.

Crossroads projects should involve three (or more) faculty members from at least two departments. Each project will provide financial support for three to five doctoral students as Crossroads Fellows. They will receive fellowship support from the Graduate Division for one quarter (with a stipend equivalent to other Graduate Division fellowships—currently $8,000 per quarter—as well as tuition, fees, and health insurance), and will be supported as TAs or Associates for another quarter, with funding provided by the Dean of the participating academic College or Division.
PROGRAM DESCRIPTION

The research seminar will span three consecutive quarters (not necessarily in one academic year), allowing for in-depth cross-disciplinary study by the faculty and graduate students. Teaching credit will rotate among the three lead faculty, but all participating faculty members will participate fully during all three quarters. Seminars should be open to enrollment by (and made attractive to) other graduate students, in addition to the Crossroads Fellows. The seminars should provide educational benefit to the students as part of their training as scholars and educators, and should fully engage the students in the conceptualization, design, execution, and presentation of the research.

Up to $1,000 per Fellow may be available to support research activities associated with the project (this can be pooled to assist an entire project). These funds can be requested as part of the proposal, if desired activities are known; alternatively (or additionally, up to the total budget limit), such funds can be requested during the project year as the faculty and students collaborate to refine the project.

In addition, up to $3,000 per project may be available for program support related to the research area. For example, projects might request funds to bring invited speakers onto campus to participate in the seminar and give a public lecture, to rent film or other media, or to support activities that allow for the dissemination of the results of the research to the wider community. Such programs should both directly benefit the students in the course and provide a public event or events that will be interesting to a substantial campus audience. These funds can be requested as part of the proposal, if desired activities are known; alternatively (or additionally, up to the total budget limit), such funds can be requested during the project year as the faculty and students collaborate to refine the project.

Prior Crossroads groups—even those whose leaders have prior experience in interdisciplinary collaboration—found that getting up to speed is challenging. To help with this, PIs will be linked with mentors
from the group of prior Crossroads PIs. In addition, the Crossroads program coordinator, who is an expert in interdisciplinary education, will lead the research group through a series of exercises designed to elicit participants’ understanding of their own discipline’s norms and knowledge areas, recognize the differences among disciplines, and find the points of contact that will lead to effective collaboration in the context of the project topic area.

The graduate Crossroads Fellows also must bring their experiences from participation in the research project into one or more undergraduate or professional masters courses. These may be new courses, or they may be existing courses. A key requirement of these courses is that the Fellows bring their experiences with the Crossroads initiative – their experience with inter- and cross-disciplinary research collaboration – into the undergraduate or professional masters class(es) in explicit ways. The teaching component may involve one or multiple courses, either existing or proposed, that have TA support or would have enrollments large enough to justify TA support. In some cases, one or more Fellows may work as a Teaching Associate. During this quarter, the Fellows will receive standard salary and benefits for a TA or Associate.

To assist them with bringing their collaborative inter- and cross-disciplinary experience into the classroom, the graduate Fellows will be required to take GRAD 210, *College and University Teaching, from Theory to Practice*, in one of the quarters prior to their teaching quarter. This course goes beyond TA training to prepare students to run their own courses as future faculty, by exploring course planning, implementation, assessment and evaluation. GRAD 210 will be supplemented by Crossroads-specific training on bringing research and interdisciplinary perspectives into the classroom. During the quarter that they are taking this class, the Fellows will be supported by a fellowship from the Graduate Division.

The Crossroads Fellows might teach courses within the discipline as well as in broad-ranging general education courses. Interdisciplinary and cross-disciplinary research ideas and experiences can be brought into these classrooms in a number of ways, which will be in part dictated by the nature of the disciplines and collaborations—proposers are encouraged to be innovative, while recognizing that
those teaching plans must be feasible and sustainable. Possible approaches include: participating faculty teaching an established course TAed by Fellows and incorporating interdisciplinary research notions, Fellows TAing in topic-driven courses that can be explored through multiple disciplinary lenses, and so forth.

New courses should support curricular needs within the relevant departments, and should be endorsed by the relevant department chairs, with a plan to make them available on a continuing basis.

Proposals will be judged in part on their level of predicted impact on undergraduate and professional Master's education at UC Santa Barbara: how clearly they connect the research seminar to the undergraduate classroom, and provide a plan for curriculum development and teaching mentorship.
TIMELINE AND KEY CONSTRAINTS

- The deadline for submitting proposals is October 20, 2017. In future quarters, the due date will be the end of week 3 of the quarter.

- The research seminar should start 2-3 quarters before the quarter in which the Fellows teach; the latter is set by the undergraduate/professional masters curriculum needs (e.g., the course in which the Fellows will TA is always offered in fall).

- Proposals should be submitted at least 3 quarters before the planned start of project (e.g., S17 submission for S18 start).

- Recognizing that the structure of this program is very different from standard grant or fellowship programs, it is unlikely that your proposal will be accepted “as is.” You will receive feedback from the Graduate Division, in consultation with relevant College and Divisional deans, and promising proposals will be invited to resubmit.

- If the PIs are proposing a new course in which the Fellows will teach, the relevant department and curriculum chairs should provide a letter of support, indicating the extent to which the topic of the new course will be a valuable addition to the curriculum and whether, should the course be successful, the department will seek to offer it on an ongoing basis (including allocations of TA resources as relevant).

- If the PIs are proposing that the Fellows will teach in established courses that are not taught by the PIs, then they should obtain written letters of support from the course instructors agreeing to the syllabus changes that the Fellows will develop. If the courses are required for the major, agreement from the curriculum chair may also be required before modifying the course.

- PIs are strongly encouraged to talk with Associate Dean Bruce Kendall (bruce.kendall@graddiv.ucsb.edu) to discuss their ideas for a proposal.
EVALUATION

At the conclusion of the project, PI’s will be required to submit a report on project outcomes, including:

- Description of activities in the graduate research seminar
- Narrative course evaluations for the graduate research seminar.
- Description of pedagogical innovations in the undergraduate/professional masters course(s)
- List of research outcomes
- Description of how the project contributed to Fellows’ growth and professional development

Any plans to continue research in the project area and/or to build on the collaboration

In addition, both faculty and Fellows will participate in occasional surveys and focus groups, as part of the overall program evaluation required by the NSF funding.
PROPOSAL INSTRUCTIONS

Your proposal should contain the following elements:

- **A cover page that specifies:**
  - The names, affiliations and contact information of each of the faculty PIs
  - The title of the proposed project
  - The anticipated number of Crossroads Fellows
  - The name(s) and course number(s) of the undergraduate or professional masters course(s) in which the Fellows will teach

- **A proposal narrative (see next section).**

- **A 2-page CV from each faculty PI**

- **A budget for research funds and/or program support, as applicable. Include both the amounts requested and a justification.**

- **Letters from all associated department chairs confirming that the Crossroads graduate research seminar will be part of each faculty member’s teaching load for the relevant academic year, expressing support for the proposed modification of existing courses, describing how proposed new courses support the curriculum, and committing NRST for the Fellows in their TA quarter if required.**

- **Supporting letters from curriculum chairs and course instructors, as appropriate (see previous section).**

Proposals should be sent to Bruce Kendall (bruce.kendall@graddiv.ucsb.edu) by October 20, 2017.
Please address the following areas in your narrative:

A. RESEARCH COMPONENT (2 pages max). Describe (a) the topic, (b) the format of the research collaboration, (c) the disciplines and disciplinary perspectives of the collaborators involved in the project, and (d) the products that are expected to result from the work.

The proposal should make the case for why the proposed research addresses an important topic and develops an innovative approach, and how it will benefit from collaboration. Projects may be associated with current research centers, focus groups, or existing collaborations; such continuing projects should explain how they are doing something substantially new (e.g., engaging another discipline, addressing a new question, etc.).

From what disciplines do the faculty involve in the project come? How do the faculty understand the topic based on that disciplinary perspective? How do the faculty complement one another with regard to their topical and methodological expertise? What roles will the faculty and fellows play in the research project? How will the faculty facilitate interdisciplinary communication?

Some projects might lead to a single co-authored work; in others, participants might produce multiple works that are coordinated and cross-refer to a common theme or problem. In the latter case, describe how concepts will be integrated and active collaboration will be maintained among participants.

All proposals should discuss potential long-term campus impacts of the project (creating new courses/curricula, forging important academic working relationships, writing extramural grant proposals, etc.).

B. UNDERGRADUATE / PROFESSIONAL MASTER’S COURSE COMPONENT (2 pages max): Address the thematic connection between the research seminar and the proposed undergraduate or Master’s courses, as well as the integration of research and teaching. How does the course integrate with the research goals of the project? How will undergraduate teaching be enhanced? If a new course, describe the general topic
and goals of the course; if an existing course, describe how it will be modified. Provide a brief curriculum plan, discuss the curricular impact of the course, and list any course requirements that it will fulfill. Include the types of instructional enhancements and pedagogical innovations that are expected to be developed, and approaches for evaluating the effectiveness of these ideas in practice.

Provide justification for TAs based on projected enrollments and discuss the extent to which the TA:Student ratio fits divisional or college norms. If TA commitments to existing courses will be expanded, please discuss these plans with the relevant divisional or college dean(s) as well as department chairs. If new courses will be created, it is the responsibility of faculty PIs to get the course approved and, if appropriate, designated as satisfying a General Education requirement, once they are notified of the award. Note that faculty and Fellows should collaborate in identifying, planning, and developing instructional enhancements and pedagogical innovations for the course(s). Groups are encouraged to meet with staff from Instructional Development for assistance in formulating effective evaluations.

C. LINK TO GRADUATE EDUCATION OF FELLOWS (1 page max): Describe how the graduate education of the Fellows will be enhanced by participating in the project. The research performed by Fellows should support or productively complement their ongoing dissertation work or research interests. Priority will be given to broad-based interdisciplinary projects of interest to students from multiple departments. Please address both intellectual development and professional training.

D. DESCRIBE THE PROCESS BY WHICH FELLOWS WILL BE SELECTED, and indicate the total number of graduate students who are likely to be interested in the course. Describe how a diverse group of students (both in terms of discipline and in terms of UCSB’s diversity criteria) will be recruited. Many Fellows benefit if they are at middle stages of their graduate education, exploring topics or planning out proposals for their dissertation research; earlier students (including first-years) may also be suitable. Experience suggests these projects are less likely to be useful for graduates who are already ABD and deeply immersed in their dissertation. Not all Fellows in a given project are required to have the same teaching experience—for example, a more advanced graduate student might be an Associate, while more junior fellows serve as TAs.