



General Programmatic Terms and Conditions for the Geoscience Teacher Training (GEO-Teach) Program, (NSF 06-526)

- 1. Key Personnel:** Except for the Principal Investigator (PI) or Co-PI(s) identified in this award, requests to make any changes to personnel, organizations, and/or partnerships specifically named in the proposal, that have been approved as part of this award, shall be submitted in writing to the cognizant NSF Program Official for approval, prior to any changes taking effect. Requests for prior approval of changes to the PI or Co-PI(s) must be submitted through FastLane for review by the cognizant NSF Program Official and approval by the NSF Grants Officer.
- 2. Program/Project Description:** The National Science Foundation's Geoscience Teacher Training (GEO-Teach) program, funded by the Geosciences Directorate (GEO), is designed to establish transformative and effective mechanisms for improving the nation-wide quality of geoscience instruction, primarily at middle and high school levels. The overarching aim of the GEO-Teach program is to provide teachers with easy access to, and training in the use of, high-quality curricular materials and the current state of scientific knowledge, in order to enhance student understanding of, and appreciation for, the importance of the geosciences.

GEO-Teach projects are expected to take a leadership role in developing a common sense of purpose among scientists and educators drawn from across the geoscience disciplines regarding geoscience education. GEO-Teach projects are encouraged to adapt or develop innovative strategies designed to:

- Emphasize the importance of an Earth system science approach which promotes integration of content drawn from atmospheric science, Earth science, and ocean science disciplines;
- Promote the relevance of the geosciences to modern society;
- Prepare teachers to reach "highly qualified" status, as defined in the No Child Left Behind Act of 2001.
- Identify and provide easy access to existing high quality educational materials, rather than develop new curricular materials;
- Establish effective, scalable dissemination mechanisms that engage, and facilitate participation of, broad segments of the geoscience research and teaching communities, and which utilize existing high-end cyberinfrastructure, where appropriate; and,

- Result in widespread implementation of pre-service teacher training and in-service professional development programs that are based on proven best practices.
3. **Project Governance and Governing Responsibilities:** The Awardee will ensure that an efficient and effective project governing structure is in place throughout the award period to support and perform all critical or significant project activities. Among the governing components will be:
- A Leadership Team, consisting of the PI and all Co-PIs and/or project directors from collaborating institutions. The Leadership Team will oversee all aspects of program development, communication, and dissemination. This group will have direct responsibility for the timely execution of primary tasks identified in the project timeline and meeting NSF reporting requirements. The Leadership Team will be expected to meet on a regular basis (either in person or through conference calls), will be chaired by the PI.
 - A National Advisory Board, consisting of selected science educators, geoscience researchers, middle school and high school teachers, and representatives from the scientific and/or science education communities, as appropriate. The National Advisory Board is required to meet at least once a year, and will be responsible for reviewing project plans and providing advice to the Leadership Team regarding program direction, educational content, and strategies for successful implementation. The Leadership Team will nominate a chair (and optional co-chair) for the National Advisory Board; the chair and co-chair may not be the PI or a Co-PI on the project. The chair (and optional co-chair must be approved in writing by the cognizant NSF Program Official. The cognizant NSF Program Official or another NSF representative will attend meetings of the National Advisory Board.
4. **Reporting Requirements:** The Awardee will provide annual and final reports, plus ad hoc reports as designated by the cognizant NSF Program Official. Content, format, and submission time line for ad hoc reports will be established by the cognizant NSF Program Official. The Awardee will submit reports via FastLane using the appropriate module; for any report for which a FastLane module does not exist, the Awardee shall submit using the “Interim Reporting” module. Reports include:
- The standard annual progress report;
 - Statistical reports on numbers of teachers and/or institutions served, to be submitted annually by October 31;
 - A copy of all evaluation data and/or reports provided by the external evaluator for the current year’s activities, due on the same date as the annual report; and,
 - A copy of agendas, minutes, or reports of advisory committee meetings related to project management, due one month from the date of the meeting.
5. **Awardee Support of Ongoing Management and Oversight:** The Awardee will ensure full commitment and cooperation among the governing structure components, and all project staff during all ongoing NSF project management and oversight activities. The

Awardee will ensure availability of all key institutional partners during any desk or on-site review as well as timely access to all project documentation.

- The Leadership Team will meet with the National Advisory Board a minimum of once per year on an annual basis.
- As specified in the GEO-Teach solicitation NSF 06-526, each Awardee will undergo a mandatory critical review and site visit by NSF staff, including the cognizant NSF Program Official, during the second year of the project, to be completed prior to June 30, 2008.
- The PI or Co-PI(s) will communicate with the cognizant NSF Program Official by email or telephone on a (minimum) bi-monthly basis regarding major activities and progress-to-date.

6. Additional Programmatic terms and conditions: The Awardee agrees to participate in activities periodically organized by the cognizant NSF Program Official for the purpose of bringing project leaders from different GEO-Teach projects together to discuss opportunities for synergy and collaboration/coordination. The Awardee agrees to conduct formative and summative evaluation of project activities in order to assess their impact on participating teachers. Parameters to be evaluated include, but are not restricted to, teacher scientific content knowledge, comfort level in teaching specific Earth system science topics, ability to teach specific skills in the Earth system sciences, and teacher retention rate. Additionally, the Awardee agrees to provide relevant observations and evaluation data collected for the project to the cognizant NSF Program Official, for the purpose of determining the potential for successfully scaling up specific project strategies and activities to reach more teachers. The Awardee understands that these project data may be shared by the cognizant NSF Program Official with an external evaluator contracted by NSF for the purpose of evaluating the GEO-Teach program.