The Department of Chemistry and Biochemistry underwent a review of its graduate program during the spring of 2009. The review was based upon an extensive self-evaluation prepared by the Chair of the Department as well as face-to-face meetings and responses to questionnaires involving all of the stakeholders. The Review Committee (Dr. Michael Farmer (Chair), Dr. Calvin Barnes, Dr. Darryl James, and Dr. Max Diem (external; Northeastern University)) presented its findings to the Graduate School, and on April 17th, a meeting was convened involving the Provost’s Office, the College of Arts and Sciences, the Graduate School, and member of the Committee to discuss the findings of the Review Committee. The Chair of the Department of Chemistry and Biochemistry was then asked to provide a response to the findings and suggestions of the Committee. This document is, then, the response to the Committee report.

In order to provide a measured response to the suggestions of the Committee, this document will list a set of proposed action items under each of the changes suggested by the Committee (in boldface), to be undertaken during the next calendar year. The comments of the External Reviewer, where in concert with the suggestions of the Internal Committee, are included in italics. Where the External Reviewer comments are unique, they are indicated as separate italicized items. The Departmental Responses are in italics.
1. Guarantee assistantships for 12 months. The department currently finds non-State sources to accommodate 12-month stipends, but these solutions are inexact and insecure. Texas Tech should commit to providing 12-month stipends for all supported graduate students. Increase number of teaching assistantships to account for increasing number of undergraduate laboratories. Guarantee assistantships for 12 months.

The Department will work with the College of Arts and Sciences and the Office of the Provost to identify revenue sources to allow for guaranteed twelve-month stipends. The Department will also work with the Office of the Provost to increase the number of Assistantships, commensurate with the increasing number of undergraduate laboratories.

2. Evaluate mechanisms to better ‘streamline’ the path to PhD candidacy so that most students reach candidacy at the end of their second year or beginning of their third.

The Department will use its Roundtable Discussion format to begin discussions to reduce the time required for graduate students to achieve candidacy status. The Department will attempt to streamline its Diagnostic Exam requirements as well as the number of courses required for candidacy as well as its Cumulative Exam format.

3. Outline a sustainable plan with the College and University to repair or replace aging laboratory equipment, both for undergraduate labs and graduate research.

The Department Chair will task the Graduate Affairs Committee in coordination with the Associate Chair for Infrastructure to develop a depreciation and replacement plan for graduate research equipment. The Department Chair will ask the Associate Chair for Academics to take the lead in developing a plan to improve the quality of undergraduate laboratory equipment.

4. Increase the number of teaching assistantships to account for increasing number of undergraduate laboratories. This requires quick response from the University when additional TA support is requested; otherwise the lag time places strains on teaching assistants and the graduate program in general.

The Department will work with the Office of the Provost and the College of Arts and Sciences to increase the number of Assistantships, commensurate with the increasing number of undergraduate laboratories.

5. Increase F&A return (or reduce the department’s contribution to new faculty set-up) to permit purchasing of service contracts for instruments and facilities. Alternatively, devise a campus-wide policy for support of research-grade, multi-user labs. Increase F&A return (or reduce the department’s faculty set-up contribution) to permit purchasing of service contracts for instruments and facilities.

Some of the resources to respond to this item are beyond the scope of the Department, and, to a certain extent, rely upon the aegis of the Office of the Vice President for Research (VPR). In any event, discussion will be held during faculty Roundtable Discussions for strategies to improve both the number of grants written as well as grants that generate indirect cost. Discussions will be pursued with the VPR’s Office to reduce the amount of F&A return used for start up, while increasing the discretionary amount for service contracts. In addition,
discussions will be held with the VPR and Provost Offices concerning the possibility of a campus-wide policy for support of research equipment and multi-user facilities.

6. Continue to work with other departments, the College and the University to maintain multi-user laboratories. **Commit staff positions for facility managers / system administrators.**

   The Department will continue to work with other departments in the Sciences and Engineering to maintain and develop multi-user facilities. The Department will plan to commit at least one staff position in the Department to at least a half-time System Administrator.

7. Increase faculty lines in both strategic and underserved areas while admitting more flexibility in faculty replacement. **Target applications toward, and invite potential graduate students interested in the low-population research areas (i.e., inorganic and the physical/theoretical chemistry divisions), some of which are the department’s choice of areas of excellence. This point should be achievable relatively easily, given that the pool of graduate applications is about 300.**

   An increase in faculty lines will require resources from the College of Arts and Sciences, the Office of the Provost, and the Vice President for Research. The Department will target in its recruiting efforts graduate students from underrepresented research areas in an effort to increase the number of students from those areas who matriculate.

8. Continue to target applications from under-represented minorities into the graduate program by advertising the graduate program specifically at south/central minority institutions. The STEM programs should produce some results soon in this direction. **Target applications from under-represented minorities into the graduate program by advertising the graduate program specifically at south/central minority institutions.**

   We will explore various mechanisms to improve minority recruiting of graduate students during the next several years. We will target recruiting at local HBCU’s and HHCU’s, as well as at our regional and national American Chemical Society meetings.

9. Continue several initiatives that improve transparency, faculty engagement and faculty democracy including:

   a. Faculty Merit Evaluation Committee;
   b. Consider Publishing an Annual Research Report;
   c. Continue to broaden external funding sources (e.g. NIH);
   d. Maintain and buttress faculty Mentoring, such as proposal review.

   These items will certainly be continued. Specifically:

   1) The Merit and Productivity Committee in the Department will be tasked with exploring differential teaching loads.

   2) The Annual Report to our advisory council (the Chair’s Council) will be more widely disseminated.
3) Researchers in the Department will explore new funding agencies, and will work to obtain NIH funding.

4) The Proposal Review Committee will be strengthened, and the mechanism for mentoring pre-tenure faculty will be explored.

10. Increase the number of ‘sweetener’ scholarships, to help recruit outstanding graduate student prospects.

   The Department will work with the Office of the Provost and the College of Arts and Sciences to increase the number of inducement scholarships for the purpose of increasing the quality of incoming graduate students.

11. Increase staffing in the Office of Sponsored Programs to help with grant submissions via grants.gov, to effectively administer grants, and help faculty identify possible grant sources.

   This is outside of the purview of the Department. However, we will continue to work with the Office of Research Services and the Vice President for Research Office to improve grant activities. We will also look into the feasibility of hiring a Departmental Account Manager.

12. Re-establish differential teaching loads for non-research active faculty.

   The Merit and Productivity Committee in the Department will be tasked with exploring differential teaching loads.

13. Cross-list introductory graduate and advances undergraduate courses to permit more advanced graduate courses to be offered; explore the possibility for on-line graduate course.

   The Department will explore some of these possibilities, and will certainly seek to increase the number of “piggyback” undergraduate/graduate courses.

14. A set of milestones and measurable goals need to be established that allows the department to gauge its progress to “top 50” status.

   The Chair will work with the Merit and Productivity Committee, the Executive Committee, and the faculty in general to establish milestones and metrics to gauge improvement in Departmental productivity.