DATE: November 27, 2014

TO: Viviana Vladutescu, Chair of College Council Curriculum Committee

FROM: Curriculum Subcommittee

Henry Africk (Chair), Ann Delilkan and Farrukh Zia

RE: Final Report for Proposal 14–13: Bachelor of Science Degree in Applied Chemistry

PROPOSAL OVERVIEW:

The Department of Chemistry proposes a Bachelor of Science degree program in Applied Chemistry. The Applied Chemistry program will provide the hands on laboratory training necessary for students to launch careers in chemical industry and in the broad range of industries that utilize analytical chemistry. In accord with its applied focus, the proposed BS degree emphasizes the “college to career” route, recently highlighted by the American Chemical Society. While fulfilling this primary goal of excellent preparation for immediate entry into a career position, the proposed program will also prepare students for post-baccalaureate study because it will meet all of the American Chemical Society’s requirements for approval of bachelor’s degree programs.

RATIONALE:

Through a comprehensive job needs analysis focused in and around New York City, the Department of Chemistry has identified significant opportunities for bachelor’s-level chemistry graduates with strong experience in chromatography and spectroscopy. None of the other CUNY colleges offers specific undergraduate chemistry courses in the areas of instrumental chromatography and advanced spectroscopy. Further, of the other CUNY campuses, only York College offers credited internships in their chemistry bachelor’s degree programs. According to Chemical and Engineering News, “Internships in industry increase a new graduate’s chance of landing a permanent position. Finally, the New York State Department of Labor projects strong growth in cross-disciplinary sciences (environmental science, biochemistry) that rely on chemical analyses.

STRENGTHS:

The BS in Applied Chemistry will prepare students for careers in traditional industries like pharmaceuticals and personal care, and also for careers in emerging cross-disciplinary areas like biochemistry, environmental science, materials, and regulatory affairs. This will better align the department’s degree offerings with the college’s core mission of training students for careers in applied science. The proposed BS in Applied Chemistry will complement the existing AS in Chemical Technology and will provide a seamless path for AS Chemical Technology students to continue their studies. The City Tech Department of Chemistry is extraordinarily well equipped to support the hands on laboratory analysis work that will be a central feature of the BS in Applied Chemistry. The Curriculum Subcommittee finds this proposal to be carefully prepared and well documented.

WEAKNESSESS:

None

SUBCOMMITTEE ACTIVITIES:

The subcommittee met with the proposers, Provost Bonne August, Associate Provost Pam Brown, Dean Karl Botchway and Kim Cardascia on November 11. Minor modifications were recommended and incorporated in the final document. An open hearing was held on November 20.