Addendum to the 2.23.2017 Report of the Undergraduate Studies Committee

Executive Summary of the 1.24.17, 2.14.17, and 2.28.17 UGSC Meetings:

New Degrees Approved

Bachelor of Science in Bioanalytical Chemistry
Bachelor of Science in Computational Chemistry and Biochemistry
Bachelor of Science in Environmental Chemistry
Bachelor of Science in Forensic Chemistry
Bachelor of Science in Medicinal Chemistry

Degree/Program Changes Approved

Bachelor of Science in Psychological Science: Changed from *Bachelor of Science in Psychology* with new CIP code, some specialization and course realignments, and an increase in 3 credit hours for degree completion.

Bachelor of Science in Bioinformatics: Change to CS requirements reduces the total credit hours in the degree from a range of 129-130 to 127-128 depending on track options.

Bachelor of Science in Biochemistry: Change to physical chemistry course requirements due to a change in prerequisites reduces the total credit hours in the degree from a range of 127-128 to 126-127 depending on electives selected.

Degree/Program Modifications forwarded as Information Items

Bachelor of Science in Applied Mathematics: Change to the CS course sequence.

Bachelor of Science in Social and Economic Development Policy: Added new courses and course choices and allows minor substitution with approval.

Bachelor of Information Technology and Management: Changes to course alignment including adding one hour to ITP ITM 100, moving it to the third semester and requiring it for transfer students; adding courses to two specializations; and changing Bulletin sample curriculum for transfer students to reflect full-time attendance.

Bachelor of Science in Biomedical Engineering: Changes to the CS course sequence and to CS, ECE, BIOL, and CHEM course requirements in specific tracks within the degree.

Premedical Studies Minor: Changes a BME Physiology requirement for the minor.

Bioinformatics Minor: Added as a new interdisciplinary minor with courses from Biology and Computer Science.

Committee Actions Taken

UGSC IIT Core Curriculum Assessment Subcommittee: Rebecca Steffenson agreed to chair and the committee membership was set.

UGSC Subcommittee on Curriculum Modification: Established to evaluate the role of the UGSC in reviewing major versus minor curriculum changes (Appendix B and Appendix P of the faculty handbook); Phil Troyk & Nick Menhart chair.

UGSC Core Curriculum Subject Subcommittees: Standing chairs for these subcommittees were appointed; these subcommittees form as needed.

New items to report since the 2.23.2017 Report was submitted (Addendum)

In the 2.28.17 UGSC meeting, the following items were approved by unanimous vote, and are forwarded to the University Faculty Council for approval as Curriculum Changes:

Change to the Bachelor of Science in Psychology:

a. The CIP code has been changed to reflect a science-orientated degree program.

b. As a result of the new CIP code, the degree program name has been changed to *Psychological Science*.

c. The number of math credits is now aligned with the core curriculum requirement set forth by IIT.

d. The number of psychology major hours has increased by 3 credit hours.

e. Students have the option of taking either PSYC 100 or LCHS 100 (ITP for undecided Lewis College students.)

f. The behavioral health specialization has been created to eliminate the overlap between the clinical and behavioral health specializations. This change has been made in consultation with the clinical program.

g. Psychology will consult with the Math department to ensure its requirements align with the Bulletin descriptions.

Due to the change in program title and CIP, this change would seem to require approval as a new degree although the content of the program is consistent with the existing BS in Psychology. It has been presented as a new degree. Details and justification are linked from the UGSC Minutes.

Changes to programs offered by the Biology Department:

a. *Change to the Bachelor of Science in Bioinformatics:* This change removes CS 105 as a requirement of the degree, due to an identified redundancy with CS 115. This reduces the total credit hours in the degree from a range of 129-130 to 127-128 depending on track options. This is a major change. Details and justification are linked from the UGSC Minutes.

b. *Change to the Bachelor of Science in Biochemistry:* The replaces the physical chemistry course requirement from CHEM 344 Physical Chemistry II to (CHEM 344 or CHEM 438 Physical Biochemistry) due to a change in prerequisites to CHEM 344. This reduces the total credit hours in the degree from a range of 127-128 to 126-127 depending on the physical chemistry elective selected. This is a major change. Details and justification are linked from the UGSC Minutes.

In the 2.28.17 UGSC meeting, the following items were presented and are forwarded to the University Faculty Council for consideration as information items:

Modifications to the Bachelor of Science in Biomedical Engineering:

a. Increase the ability of students to solve mathematically complex biomedical problems, across all three BME tracks, without increasing the number of credits required for graduation. This will be accomplished by replacing CS 115 with CS 104 which introduces students to computing through the use of Matlab, and by replacing BME 200, the existing introduction to Matlab, and BME 490 with BME 422, a Matlab-based numerical methods course.

b. Enhance the exposure of programming and electrical engineering in the BME Medical Imaging curriculum. This will be accomplished by replacing CS 116 (Java II), a BME Elective, and ECE 216 (Circuits II no lab) (total of 8 credits) with CS 201 (Advanced intro to Java) and ECE 213 (Circuits II + lab) (total of 8 credits) To avoid credit overload in the Medical Imaging track, 3 credits of BME Elective were dropped from the curriculum, as enhanced exposure to programming and circuits was determined to be of more educational value to Medical Imaging students than the BME Elective. This modification applies to the medical imaging track only.

c. Further enhance the BME Cell & Tissue curriculum with more relevant foundational courses that will be applied to solve engineering problems in required BME courses. This will be accomplished by replacing CHEM 237 (Organic Chemistry I + lab) with CHEM 235 (Organic Chemistry I, no lab) or CHEM 237 (for the Cell & Tissue track only) and replacing CHEM 239 (Organic Chemistry II) with BIOL 403 (Biochemistry). Due to recent MCAT prerequisite requirement changes, BME students are unlikely to finish both degree and pre-med requirements within four years. These changes recognize this and allow a more logical curriculum progression when there is no longer an expectation that pre-med students will complete their undergraduate studies in four years.

d. Details and justification for these program modifications are are linked from the UGSC Minutes.

In the 2.28.17 UGSC meeting, the following committee actions were taken:

UGSC Core Curriculum Subject Subcommittee Chairs:
Subcommittees must be formed evaluate assignment of Core Curriculum subject designation codes or listings in the Bulletin; subcommittee chairs will be standing and convene a subcommittee as necessary. Standing Subcommittee chairs are as follows:

Communications-intensive **(C)** courses:	Greg Pulliam
Humanities courses:	Greg Pulliam
Social and Behavioral Science courses:	Rebecca Steffenson
Natural Science or Engineering courses:	Nicholas Menhart
Mathematics courses:	Robert Ellis
Computer Science courses:	Matthew Bauer

In the 1.26.16 UGSC meeting, the following change to the Undergraduate Core Curriculum was made but appears to have never been reported to the University Faculty Council:

By a unanimous vote, the requirement that Introduction to the Profession (ITP) must be taken in the first year was eliminated.

Full minutes of all UGSC meetings are available at http://www.iit.edu/~ugsc/