The Collegial Assembly was called to order at 2:30 PM by Dean Klein. 43 faculty members were in attendance. A motion to approve the minutes of the November 15, 2019 Collegial Assembly was approved by show of hands.

Undergraduate Program Items
Assistant Dean Mike Lawlor presented a set of proposed changes to undergraduate programs.

| Summary of CST Program Changes for Dean’s Advisory Committee and Collegial Assembly |
|---------------------------------|----------------|----------------|----------------|----------------|
| Level  | Department | Degree Type | Degree Program | Change Type | Description                              |
| Undergrad  | CIS  | B.S.  | Computer Science  | Array  | Add Elective Course Description option |
| Undergrad  | CIS  | Minor | Information Science & Technology  | Array  | Add Required course option |
| Undergrad  | EES  | Minor | Geology  | Array  | Add Required course option |
| CST  | Minor | Natural Sciences  | Establish | New Program |
| CST  | B.S. | All TUTeach Programs  | Restructure  | Add Required Course |
| CST  | B.A. and B.S. | Natural Sciences  | Restructure  | Add Required Course |
| CST  | College Requirements | Credit Hours  | Change  | Allow Engineering credits to count |
| CST  | College Requirements | Bachelor of Arts Degree  | Change  | Clarifying required grades |
| CST  | College Requirements | First Year Seminar  | Change  | Clarify allowable exceptions |

Assistant Dean Mike Lawlor presented a set of six undergraduate program change proposals and three changes to CST College Degree Requirements (see above).

All of the motions to enact these program changes were approved by show of hands. The program proposals will be submitted for approval at the March 12, 2020 Board of Trustees meeting. If approved by the Board of Trustees, these program changes will take effect in Fall 2020.
Undergraduate Degree Program Changes

Computer Science, B.S.
Requested Program Change: Array

Add several newer courses to the list of Computer Science Elective course options. No change in credits in the major.

**Rationale:** These newer courses have been added to the Computer Science curriculum in the last few years and have become very popular with students.

Information Science & Technology, Minor
Requested Program Change: Array

Add CIS 1057 Computer Programming in C as an option along with the current requirement of CIS 1051 Introduction to Problem Solving and Programming in Python. No change in credits in the minor.

**Rationale:**
- Both CIS 1051 and 1057 are courses in procedural programming that cover close to the same set of topics and have the same expectations
- A student may obtain entry into CIS 1068/1968 having taken either course
- If a student has already taken CIS 1057 and decides that they'd like to pursue a minor in IS&T, it is not worthwhile to require them to go back and take CIS 1051

Geology, Minor
Requested Program Change: Array

Allow one semester of either chemistry or physics to fulfill the requirements. Currently, students only have the option of taking chemistry. No change in credits in the minor.

**Rationale:** The Geology major currently requires one semester each of general chemistry and general physics, whereas the minor requirements allow only a semester of chemistry. This restriction has been prohibitive for students from other CST majors (e.g. Math, Physics) which require physics but not chemistry as part of the major sequence. Students from these majors have expressed interest in adding the Geology minor but have been unable to fit the chemistry course into their schedules, especially if they discover their interest in geology late in their undergraduate careers.

Recent trends in the geosciences in general and the course offerings of the EES department have made it possible to design a minor sequence that emphasizes courses in the geophysical and computational aspects of geology that would not require a background in chemistry.

Natural Sciences, Minor
Requested Program Change: Establish

Establish the Minor in Natural Sciences

Credits in the minor: 23-24

**Rationale:** Modeled after the existing Natural Sciences Bachelor’s degree program, The Natural Sciences minor may attract students from CST and other colleges:
- For students outside of CST who have previously taken a small number of classes to get a view of science and a look into one of the natural science disciplines, this new minor offers opportunities to explore further and gain a natural science credential. For example, the Chemistry two semester
sequence introduces the field with a study of quantities, molecules, energetics and reactions and continues to look into kinetic and equilibrium processes or an introduction to organic and biochemistry. The Physics series looks at the universe and then allows students to choose from electricity and magnetism or mechanics and heat. The Earth and Environmental Science series starts with a look at geology, geological processes, rock minerals and more and then extends to the study of facies including field work and laboratory explorations. The Biology series gives a full overview of cellular and organismal biology.

- For CST students switching programs to another college, this new degree option allows those students to earn a minor, thus documenting completed science coursework

All TUteach Programs, B.S.
Requested Program Change: Restructure

Add SCTC 1013 Elements of Data Science for the Physical and Life Sciences to the list of required courses for all TUteach degree programs. This course may be taken in Year 1 or Year 2 of the Suggested Academic Plans.

<table>
<thead>
<tr>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Biology with Teaching</td>
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<tr>
<td>Chemistry with Teaching</td>
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<tr>
<td>Earth &amp; Space Science with Teaching</td>
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<tr>
<td>General Science with Teaching</td>
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<tr>
<td>Mathematics with Teaching</td>
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<tr>
<td>Mathematics &amp; Computer Science with Teaching</td>
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<tr>
<td>Mathematics and Technology with Teaching</td>
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<tr>
<td>Physics with Teaching</td>
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Credits in the major: +3 credits for each program

Rationale: It is becoming increasingly important for secondary school teachers to possess a background in data science, and the new course SCTC 1013 will be a valuable addition to the curriculum for all students in the TUteach programs.

SCTC 1013 is a new CST course that is being offered for the first time this semester. This course provides a basic introduction to data science. Data is ubiquitous in our society, as it is processed in fields including science, medicine, economics, and business. We evaluate surveys, test performance, analyze large data sets and more. This course will help students to understand how data is generated, collected, and used. Both inferential and computational thinking will be applied to practical problems and common problems faced by all in the sciences. Students will learn basic computer programming and statistical inference by working, hands-on, with real world problems.

Natural Sciences, B.S. and B.A.
Requested Program Change: Restructure

Add SCTC 1013 Elements of Data Science for the Physical and Life Sciences as a required course. This course will be recommended in Year 1 of the Suggested Academic Plans.

Credits in the major: +3 credits for each program

Rationale: The new data science course SCTC 1013 will be a valuable addition to the curriculum for all students in the Natural Sciences programs. In particular, SCTC 4396 Paradigms of Scientific Knowledge is a required course in both programs and incorporates significant data analyses, so SCTC 1013 will serve as a foundation.
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College Degree Requirement Changes

1. Allow College of Engineering credits to count towards the 90-credit total, of which 45 must be in upper-level courses. Currently, only CST and CLA credits may be used to fulfill this requirement.

Rationale: The current credit requirement prohibits Engineering students with a second major in CST from switching their primary major to CST due to the large number of Engineering credits that they have earned. A few Engineering students have expressed an interest in switching to CST, so why prevent them?

2. Clarify allowable waivers to the First-Year Seminar Requirement.

Rationale: Students transferring into CST who can complete their degree requirements within 1 academic year (2 semesters) will be granted a waiver from this requirement. These students are very close to degree and will not likely benefit from the transfer seminar course.

3. Clarify grade needed for successful completion of Bachelor of Arts Language and Upper-Level Distribution Requirements

Rationale: Current wording is vague regarding what constitutes successful completion of these requirements. Add grade of C- or better.

For the full details, please see: https://cst.temple.edu/sites/cst/files/documents/Program Changes_Collegial Assembly_2-13-20_final.pdf

Summary of Motions Related to Graduate Programs
Associate Dean Richard Souvenir presented a set of proposed changes to graduate programs.

- CST PSM program: The College of Science and Technology's Professional Science Master's Program (PSM) is being restructured. The PSM was approved but dormant.
- Graduate Certificate in Cyber Defense and Information Assurance (new program): Designed for teachers.
- Graduate Certificate in Mathematics Teaching (new program): Designed for teachers.
- P.S.M. in High Technology: Satisfactory completion of the CST Undergraduate Program for Scientists and Engineers, MATH 5063 Introduction to High Performance Computing.
- For the full details, please see: https://cst.temple.edu/sites/cst/files/documents/Program Changes_Collegial Assembly_2-13-20_final.pdf

Associate Dean Allen Nicholson gave a presentation on the CST Bylaws project. The College currently follows the standard (default) Bylaws. These Bylaws were not designed to be permanent, but
for a college to use while it developed its own permanent Bylaws. The College will be starting the process of developing its own Bylaws. The Dean will be assembling a committee of full-time faculty (TT and NTT) to assist in drafting the Bylaws. There will be input from the Department Chairs in this process. The draft Bylaws will be reviewed by University Counsel and OVPFA, prior to review by the Dean’s Advisory Committee, and the Collegial Assembly. It is expected that the Bylaws would be approved by the President by the end of the 2020 Calendar year.

Dean Klein gave a presentation where he congratulated Adjunct Professor of Chemistry, Kevin Cannon, for the Part-time Faculty Instructional Award, and to Associate Professor of Instruction in Chemistry, Robert Rarig, for the General Education Excellence in Instruction Award. In addition, the Dean mentioned that Physics Professor John Perdew won the Paul Eberwine Research Award. The Dean provided information on the Franklin Award in Chemistry symposium, to be held in April on the main campus. The award honors the accomplishments of Michele Parinello and Roberto Car; the Dean mentioned that Professor Perdew also should have shared in this award.

There was no old business.

There was no new business

The collegial assembly adjourned at 3:30 PM.