December 9, 2014

President William Powers Jr.
The University of Texas at Austin
MAI 400
Campus Mail Code: G3400

Dear President Powers:

Enclosed for your consideration are Updates to the Undergraduate Core Curriculum Course Lists (D 11981-11984), which were approved by the Faculty Council at its meeting yesterday. Final approval resides with The Texas Higher Education Coordinating Board.

Please let me know if you have questions or concerns regarding this matter.

Dean Neikirk, Secretary
General Faculty and Faculty Council

Enclosure

DPN:dlr

xc: Gregory Fenves, executive vice president and provost
Carol Longoria, assistant deputy to the president
Brent Iverson, dean, School of Undergraduate Studies

Electronic copies via email:
Bill Beckner, chair, 2014-15 Faculty Council
Janet Dukerich, sr. vice provost
Lydia Cornell, assistant to Janet Dukerich
Jen Morgan, senior program coordinator, School of Undergraduate Studies
Kati Pelletier, senior program coordinator, Office of the Executive Vice President and Provost
Brenda Schumann, associate registrar
Cely Smart, assistant registrar
DOCUMENTS OF THE GENERAL FACULTY

UPDATE TO THE CORE CURRICULUM COURSE LISTS FOR THE UNDERGRADUATE CATALOG, 2014-2016

On behalf of the Undergraduate Studies Advisory Committee (UGSAC), Dean Brent Iverson (undergraduate studies) submitted the following motion to change the core curriculum course lists for the 2014-2016 Undergraduate Catalog.

The proposed changes to the core course lists were reviewed and approved by UGSAC during its meetings on March 21, 2014 and November 12, 2014 and the dean of the School of Undergraduate Studies (UGS) approved the changes on November 12, 2014. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty.

The secretary has classified this proposal as general legislation. The Faculty Council will consider this legislation at its meeting on December 8, 2014. The authority to grant final approval resides with the Texas Higher Education Coordinating Board.

Dean P. Neikirk, Secretary
General Faculty and Faculty Council

Posted on the Faculty Council website (http://www.utexas.edu/faculty/council/) on November 24, 2014.
### UPDATE TO THE CORE CURRICULUM COURSE LISTS FOR THE UNDERGRADUATE CATALOG, 2014-2016

**Motion**

On behalf of the Undergraduate Studies Advisory Committee (UGSAC), the dean of undergraduate studies requests approval to add the following courses to the core curriculum course lists, in the core curriculum areas indicated, for the Undergraduate Catalog, 2014-2016.

<table>
<thead>
<tr>
<th>Course</th>
<th>Core Area</th>
<th>Curriculum</th>
<th>Rationale</th>
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<tbody>
<tr>
<td>AFR 302M</td>
<td>Mathematics</td>
<td>In &quot;Numbering Race,&quot; which is cross listed in statistics and data sciences as SDS 310T, students learn about quantitative methodology and statistics using the lens of race. The course covers foundational topics in quantitative research methodology and social statistics (including the development of quantitative measures, descriptive statistics, bivariate relationships, and statistical controls). This course also teaches students how to analyze real-world data, and examine and critique quantitative research concerning race in America. Throughout the course, students will be exposed to a variety of substantive topics such as educational disparities, health and well-being, income and wealth inequality, and policing and mass incarceration as they relate to race and minority communities. This grounding in critical quantitative methodology and applied statistics will enable students to critically examine ongoing debates around racial classification, as well as discourse around race and social inequality that are informed (for better or worse) by social statistics.</td>
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<tr>
<td>ARC 309W</td>
<td>Visual and Performing Arts</td>
<td>In &quot;Frank Lloyd Wright: Organic Architecture,&quot; students are exposed to the aesthetics, dynamics, and critical problems of architecture as seen through the work of Frank Lloyd Wright (1867-1959), America’s most famous architect. The course equips students to appreciate and to critically assess architecture, and, where appropriate, to bring the concepts developed in the course into their own creative pursuits.</td>
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<tr>
<td>ARC 342C</td>
<td>Visual and Performing Arts</td>
<td>In &quot;Mexican Architecture and Urbanism: from pre-Columbian to Contemporary,&quot; students will study how architecture and its integrated sculpture and painting played a critical role in the rituals and celebrations that governed Mesoamerican life and how that tradition continued in the colonial times when the new buildings incorporated a Christian iconography.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
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<tr>
<td>C S 303E</td>
<td>Natural Science and Technology part II</td>
<td>In “Elements of Computers and Programming,” students learn to use the high level programming language, Python, to solve problems of the physical and natural world, from disciplines such as astronomy, biology, linguistics, mathematics, and statistics. The approach is to start with a problem and data, then to apply computer-based analysis methods to discover correlations and form hypotheses.</td>
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<tr>
<td>E E 302</td>
<td>Natural Science and Technology part II</td>
<td>In “Introduction to Electric Circuits,” students are provided with a hands-on learning experience based on fundamentals of physical sciences, including electricity, energy, and power, as they relate to the design of functional analog circuits which transform, store, and display information in the form of electrical charges. Fundamental physical principles including conservation of energy and conservation of charge are discussed in detail, and used to develop techniques for the understanding and analysis of electric circuits. Interactions of materials with light are introduced, and used to explain the science underlying technological processes such as energy conversion, e.g., in solar cells, and sensing, e.g., in photodetectors.</td>
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<tr>
<td>GEO 302P</td>
<td>Natural Science and Technology part I</td>
<td>“Sustaining a Planet” is a foundational course in environmental science that focuses on scientific theories around sustainability and the environment from the perspective of multiple disciplines, including geology, meteorology, biology, and oceanography, by studying the Earth’s natural cycles and the human affects on those cycles. Students are introduced to fundamental questions, scientific methods, and the integration of concepts across disciplines. This course can be paired with GEO 401, 302C, 302D, 302E, 302M, 303, and 303C to complete the Natural Science and Technology part I requirement. This course was in the core from 2008-2014, and was inadvertently removed during the complete redefinition of the core last year. It is listed in the core curricula of other state institutions in Texas and putting it back in the UT Austin core will assist in transfer pairing questions.</td>
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</table>

**Background**

Proposals to add the aforementioned courses to the core curriculum core course lists originated in the offering departments and have been approved by UGSAC as meeting the relevant Student Competencies and objectives, which are based on and designed to demonstrate satisfaction of the Texas Higher Education Coordinating Board’s Component Area Criteria and Objectives. The approval dates are as follows:

- **Deans’ approval dates:**
  - Cockrell School of Engineering: September 20, 2014
  - College of Liberal Arts: September 30, 2014
  - College of Natural Sciences: March 21, 2014
  - Jackson School of Geological Sciences: September 15, 2014
School of Architecture: September 22, 2014, and September 28, 2014

UGSAC approval dates: October 3, 2014 and November 12, 2014
UGS Dean approval date: November 12, 2014

This motion is to add these six courses, in conjunction with those listed in D 10727-10732, to define the core curriculum course lists for the *Undergraduate Catalog*, 2014-2016 effective in fall 2015.