Stony Brook Curriculum and its Implementation

Provost’s Report

Faculty Senate Meeting
May 6, 2014
STONY BROOK CURRICULUM

• Implementation of new Stony Brook Curriculum in fall 2014 - learning outcomes based curriculum
• Goal is to offer a more integrated, interdisciplinary approach across the curriculum
• Students required to complete 18 of 19 objectives covering coursework across a broad spectrum of academic disciplines
• New curricular objectives include:
  • Understanding Technology
  • Speaking Effectively Before an Audience
  • Evaluating and Synthesizing Researched Information
  • Critical and Ethical Reasoning
  • Experiential Learning
GRADING STANDARDS TO EARN A DEGREE FROM STONY BROOK

• Current standards requires the following:
  • Overall 2.0 (C average) in all coursework
  • Grade of C or better in each major course (some majors permit one grade of P and/or one C-)
  • Grade of C or better in Math, Writing, and Foreign Language DEC courses
  • Grade of D or better in all other DEC courses

• New proposed standards requires:
  • Grade of C or better in each of the 18 SBC objectives
Current Stony Brook grading standards to meet graduation requirements are strictest among four SUNY centers.

Current grading structure is consistent with the majority of AAU institutions.

The norm is higher grade expectations in major coursework than in general education coursework.

General education standards across AAU institutions vary to include:

- C, C-, D, D- minimum grades in individual general education courses
- C overall average grades in general education courses
CONCERNS AND IMPACT REGARDING PROPOSED MINIMUM GRADE OF C

• Entirely new curriculum and curricular requirements for students
• Experiment is still under development; will need continual review as it is implemented
• New courses still under development to provide students choices and options; for example, currently few TECH courses approved to meet this new objective
• Need to first assess curricular outcomes before raising minimum performance expectations
• Concern about the expectation that students must perform at the C level in EACH of 18 areas of knowledge.
CONCERNS AND IMPACT REGARDING PROPOSED MINIMUM GRADE OF C

- Potential negative impact on graduation rates
- Negative impact on seat availability due to course retakes – and corresponding impact on budget and classroom space constraints
- Negative impact on students receiving financial aid who need to retake a course for which they earned credit, but did not achieve the C minimum
- Potential grade inflation
IMPACT ANALYSIS

Based on performance in DEC courses:

- 13% of undergraduates earned a C-, D+ or D in a DEC course each term, equating to 2,400 seats a term
- Over course of UG career, over a third (38%) of students earned one or more grades of C-, D+ or D
- Initial implementation applicable to incoming freshmen in Fall 2014 would be smaller
ESTIMATED IMPACT AT FULL IMPLEMENTATION

Undergraduates Earning Marginal Course Grades in First Attempt at DEC Course in Each Area

- Any C-, D+ or D: 62% (62% for Zero, 21% for One, 10% for Two, 7% for Three+)
- Exception for 1st C-: 68% (68% for Zero, 20% for One, 8% for Two, 5% for Three+)
- Exception for Any C-: 71% (71% for Zero, 19% for One, 7% for Two, 3% for Three+)

Colored legend = number of marginal grades earned
Population = 21,919 unduplicated undergraduates enrolled in 2011-12 and 2012-13
FINDINGS – PATTERNS BY DEC AREA

Undergraduates Earning Course Grades of C-, D or D+ in First or Second Attempt at DEC Course in Each Area

- Grades of A, B, C
- Grades of C-, D+, D
- Avg. A, B, C
- Avg. C-, D+, D

DEC Area

A1 A2 B C D E1 E2 F1 F2 G1 G2 H I J K

Percent
## ESTIMATED FIRST YEAR IMPACT 2014-15

<table>
<thead>
<tr>
<th>Number of Marginal Grades</th>
<th>Seat impact multiplier</th>
<th>Students (N) with Grades of C-, D+ or D</th>
<th>Students (N) with Exception for 1st Grade of C-</th>
<th>Students (N) with Exception for All Grades of C-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>N x 0</td>
<td>2,003 72%</td>
<td>2,151 78%</td>
<td>2,159 78%</td>
</tr>
<tr>
<td>One</td>
<td>N x 1</td>
<td>533 19%</td>
<td>463 17%</td>
<td>464 17%</td>
</tr>
<tr>
<td>Two</td>
<td>N x 2</td>
<td>174 6%</td>
<td>121 4%</td>
<td>117 4%</td>
</tr>
<tr>
<td>Three</td>
<td>N x 3</td>
<td>48 2%</td>
<td>27 1%</td>
<td>24 1%</td>
</tr>
<tr>
<td>Four</td>
<td>N x 4</td>
<td>7 0%</td>
<td>7 0%</td>
<td>5 0%</td>
</tr>
<tr>
<td>Five</td>
<td>N x 5</td>
<td>5 0%</td>
<td>1 0%</td>
<td>1 0%</td>
</tr>
<tr>
<td>Total Students</td>
<td></td>
<td>2,770 100%</td>
<td>2,770 100%</td>
<td>2,770 100%</td>
</tr>
<tr>
<td>Est. # of seats</td>
<td></td>
<td>1,078</td>
<td>819</td>
<td>611</td>
</tr>
</tbody>
</table>

Assumes SBC applies only to incoming freshmen in Fall 2014 (est. N = 2,770). Grade distribution based on 2012 Entering Freshman Cohort performance in DEC courses in 2012-13.
Students earning low grades in their first year graduate at lower rates than those who do not.

<table>
<thead>
<tr>
<th></th>
<th>Est. N</th>
<th>Avg rate</th>
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<tbody>
<tr>
<td><strong>Total Cohort</strong></td>
<td>2,770</td>
<td></td>
</tr>
<tr>
<td><strong>Graduate in 4 years</strong></td>
<td>1,274</td>
<td>46%</td>
</tr>
<tr>
<td><strong>Graduate in 6 years</strong></td>
<td>1,856</td>
<td>67%</td>
</tr>
<tr>
<td><strong>Earning 1+ C- or lower grade in first year</strong></td>
<td>767</td>
<td></td>
</tr>
<tr>
<td><strong>Graduate in 4 years</strong></td>
<td>238</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Graduate in 6 years</strong></td>
<td>422</td>
<td>55%</td>
</tr>
</tbody>
</table>
If students who earn marginal grades that do not fulfill SBC requirements depart at higher rates, the overall graduation rate would decrease.

<table>
<thead>
<tr>
<th>Estimated additional departures</th>
<th>1%</th>
<th>5%</th>
<th>10%</th>
<th>20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students graduating in six years affected by policy in first year (N = 422)</td>
<td>4</td>
<td>21</td>
<td>42</td>
<td>84</td>
</tr>
<tr>
<td>Impact on overall graduation rate</td>
<td>-0.1%</td>
<td>-0.8%</td>
<td>-1.5%</td>
<td>-3.0%</td>
</tr>
</tbody>
</table>
FINANCIAL AID

About a third of undergraduate students receive the NY Tuition Assistance Program (TAP); just over a third receive Pell grants.

SBC grade minimum policy will have some impact on students where few electives are available.
EASING THE TRANSITION

• Maintain current standards that are already in place:
  • 2.0 overall GPA
  • C or better in major courses
  • C or better in Math, Writing, and Foreign Language objectives
  • D or better in 15 other SBC objectives*

* Note that some major courses overlap as SBC objectives, which will by default require the C minimum in order to apply to the major

• Review curricular outcomes and student performance after 1 year of implementation to consider additional SBC curricular and policy changes, including minimum grades
Any Questions?