Spring 2017

PROGRAM REVIEW FOR GENERAL EDUCATION

SONOMA STATE UNIVERSITY

GENERAL EDUCATION SUBCOMMITTEE

IMPORTANT: THIS REVIEW AND THE EXTERNAL VISIT WERE COMPLETED BEFORE THE AUGUST 24, 2017 CSU EXECUTIVE ORDER 1100 WAS ISSUED.

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GE Program Review Self-Assessment
DRAFT September 1, 2017

Chapter 1 - Administration of GE Curriculum[1]

A. Introduction to GE Curriculum

1. History of the program

The GE program at SSU is an integral part of the university's mission to provide a high-quality undergraduate education. As stated on the SSU website, the General Education (GE) program offers an investigation of the complexity of human experience in a diverse natural and social world, and promotes students' informed and ethical participation as world citizens. The GE program integrates students' academic experiences across schools and gives students opportunities to acquire skills that will enhance their cognitive, social, political, ethical, and personal growth.

The current GE program evolved out of the Pathways proposal adopted by the Academic Senate in 2003 and the GE area goals and objectives adopted by the Academic Senate in 2009. At this time, there are three paths through the GE program: The University-Wide plan, the Transfer Student Pattern, and the Hutchins School Interdisciplinary Option.

Native Student 50 Unit Plan. The University-Wide 50-unit plan is used by the majority of our students (65%) and meets all the CSU requirements. It includes ethnic studies, U.S. History, U.S. Constitution, California State and Local Government, a laboratory course, and nine units of upper division courses (see Appendix 1). There is also an older 51-unit pattern that was phased out but is still used by a few students who came as first year students before 2011 (see Appendix 2). The main difference between the 50 and 51 unit patterns is that after 2009, the School of Arts and Humanities (A&H) proposed and then passed a resolution approved by the Academic Senate to distribute the 3 units in the A1 area across A2, A3, and C3. They also moved their GE courses from three to four units, which resulted in a savings of one unit as shown in Table 1. This change enabled A&H to support the integrative learning objectives of year long first year experience courses and allowed more faculty who regularly taught four unit courses to participate in the GE program.

[1] Document prepared by John P. Sullins, Philosophy with input from the Chair of the GE Subcommittee, Heather Smith, Psychology and the GE Subcommittee members. The GE Subcommittee would like to thank Sean Johnson, Alvin Nguyen, Chelsea Kilat, Ariana Díaz De León and Giovanni Mejia for their gracious and prompt help.

Table 1. Initiative #1: Reform of GE Areas A and C

BEFORE 2009:		AFTER 2009	
A1: Oral and Written Analysis	3 units		
A2: Fundamentals of Communication	3 units	A2: Fundamentals of Comm.	4 units
A3: Critical Thinking	3 units	A3: Critical Thinking	4 units
C1: Fine Arts	3 units	C1: Fine Arts	4 units
C2: World Literature,	3 units	C2: Lit., Philos. & Values	4 units
C3: Philosophy and Values	3 units	C3: Comp. Persp. & F.L.	4 units
C4: Comparative Persp./Foreign Lang.	3 units		
	21 units		20 units

Transfer Student 48 unit pattern. The Transfer Student Pattern is an option for students transferring to SSU with at least 30 units from another institution. These students have a 48-unit pattern that is similar in all respects to the University-Wide Plan, with the exception of one less Social Science class. This plan meets all CSU requirements (Appendix 3), and around 32% of our students follow this pattern.

Hutchins Interdisciplinary Option. The Hutchins School Interdisciplinary Option is a 60-unit program where students enroll in four interdisciplinary lower-division 12-unit seminars for a total of 48 units. The additional units include 9 units of upper division work and 3 units of math. This option meets all CSU requirements (Appendix 4), and about 3% of our students take this option.

2. Distinctive aspects of the SSU GE Experience

SSU fully adheres to the CSU mandated minimum GE Breadth Requirements. SSU faculty also endeavor to create distinct GE experiences that set SSU apart from other CSU campuses but allow students to transfer freely within the CSU system. The SSU GE experience differs from other CSU GE programs in four ways; 1) the Hutchins Interdisciplinary option, 2) first and second year interdisciplinary courses that include transitional programming that support students' development, 3) an additional science laboratory course designed to foster experiential learning and 4) an ethnic studies requirement that emphasizes an interdisciplinary understanding of the experience of race and ethnicity of people who live in the United States.

Hutchins Interdisciplinary Option. Students who follow the Hutchins Interdisciplinary Option experience a very distinct pathway through the GE program. This option integrates several GE Subject Areas within each 12-unit seminar. These integrative seminars, first introduced in 1969, are designed to facilitate students' intellectual development by encouraging students to reflect actively on their own academic skills. Seminars combine large weekly symposiums with small discussion groups of 12 to14 students that are organized around themes or questions, as opposed to different disciplines. Students receive a CR/NC grade in addition to a lengthy written evaluation that assesses their cognitive skills, participation, understanding of course content, writing skills, and course assignments. Hutchin's faculty emphasize seminar skills, collaborative learning and writing. All students complete both a lower and upper division portfolio that faculty regularly review as part of their yearly assessment of the Hutchins program.

First and Second Year Interdisciplinary Courses. In 2006, the university built on its earlier success in linking GE Area A courses to a course called University 102, which was designed to help first year

students transition to college and build stronger connections to the university community. University 150 (Identity and Global Challenges) also known as the First Year Experience program (FYE) was established as a course that would combine GE areas A3 (Critical Thinking) and C3 (Comparative Perpectives) with the University 102 into a 10 unit course taken over the entire first academic year. Similar to the Hutchins model, students attend weekly lectures delivered by SSU faculty or visiting scholars, and they meet twice weekly in small groups of 17. In addition, undergraduate peer mentors work with the groups both in and out of the classroom to help establish a sense of community. This program was highly praised in our last WASC review for its innovative focus on interdisciplinary GE content and inclusion of student transition material. It has received strong evaluations from students and faculty who have participated in the course. This course is available to about 180 students, or 11% of students within the University-wide Option. Beginning in Fall 2017, University 150 (FYE) will be an 8-unit course.

Building on the success of FYE and previous incarnations of freshman seminars dating back to the early 2000s, A&H launched the Humanities learning Communities (HLC) in Fall 2012. Faculty designed these courses to be fully integrated into their majors while still being accessible to students from outside the major. These courses also deliver A3 and C3 content instruction along with transition-to-college curriculum, and they aim to facilitate a pathway to the major hosting the FLC, without excluding non-major students. Many of these HLCs also meet the ethnic studies requirement. With the exception of the Hutchins program, all A&H departments offer at least one HLC around wide topics befitting the scope of GE such as *Race and Social Justice* (CALS 165A/B), *Cave painting to Picasso* (ARTH 160A/B), *Behind the Scenes: Global Perspectives Through Film* (MLL 161A/B), *The Art of Wisdom: Compassion and the Good Life* (PHIL 160.1), *Theatre, Dance, the Artistic Process and You* (THAR 160A/B). The HLCs are typically team taught by two to three faculty members and are comprised of a combination of two linked courses for an 8-unit year long academic experience. Faculty participants participate in professional development workshops (about using peer mentors in the classroom, for example, or the treatment of transitional topics) and the creation by Dr. Sullins and Dr. Glasgow of a *Digital Guide for Multi-Disciplinary Critical Thinking* made available on Moodle for all faculty involved. The hybrid instruction model also introduces students to both lecture and small seminar teaching modalities, thus preparing them well for the rest of their college career.

In 2011, the School of Science and Technology introduced Science 120. This course, initially sponsored by a National Science Foundation grant, is designed to increase long-term retention and graduation rates for SSU science students by creating a yearlong science based course containing innovative first year curriculum that includes fieldwork, labs and field trips and applies what the students are learning to real world problems. The current course focuses on the local watershed and exploits SSU's unique connection to the Fairfield Osborne Preserve (http://web.sonoma.edu/cei/osborn/). The completion of the full year course satisfies four GE requirements: B2 (Life Sciences: biological principles), B4 (Quantitative Reasoning: precalculus), A3 (Critical Thinking), and the required Science Laboratory. This course is a popular option for science students but its one weakness is that declared Biochemistry/Chemistry, Biology, Engineering Science, Mathematics, and pre-Nursing majors cannot take it without adversely increasing their time to graduation. To help with this problem, the Philosophy department collaborated with these five majors to create Philosophy 101 A&B. This course covers the A3 GE learning objectives and the transition to college curriculum. It is taught over one academic year for 4 units so that students have access the full first year transitional curriculum. Science 120 is available to 70 students and Phil 101 A&B is available to 100 native or transfer students.

In addition to the approximately 1200 students served by the integrated GE courses described above, Table 2 lists other first year experience programs housed in the student residential communities that incorporate “stand alone” lower division GE courses. Of the 1700 students who begin SSU each fall, approximately 700 students participate in some form of living and learning community. An additional 900 students participate in other transitional courses. The few students who do not take an interdisciplinary first year courses must take single courses from the A2, A3 and C3 categories to fulfill the GE breadth requirements.

Table 2. Freshman Learning Communities, 2016 – 2017

Freshman Learning Community	Program Description	Fall Courses	Spring Courses	Learning Outcomes	# of students
Integrative GE Courses					
FYE (Freshman Year Experience)	Living/learning community; integrated curriculum with one lecture and two seminars per week	UNIV 150A (4 units)	UNIV 150B (4 units)	A3 + C3 + transition-to-college goals	200
FIRST-GEN	Thematic living/learning community focusing on first generation students	UNIV 102 + CALS 165A (6 units)	CALS 165B (4 units)	A3 and C3 + transition	50
Hutchins	Integrated liberal arts and sciences program	LIBS 101 (12 units)	LIBS 102 (12 units)	All GE except math + transition	75
Humanities Learning Communities	10-12 different courses, each in a different A&H department; one lecture and one seminar per week	COMS 160A, ENGL 160A, AMCS 165A, etc. (4 units)	COMS 160B, ENGL 160B, AMCS 165B, etc. (4 units)	A3 + C3 + transition-to-college goals	775-825
A Watershed Year: Freshman Learning Community	Integrated science/math/critical thinking	SCI 120A (6 units)	SCI 120B (6 units)	A3 + B2 + B4 + lab + transition	72
Critical Thinking for Science	Philosophy course designed for science majors	PHIL 101A (2 units)	PHIL 101B (2 units)	A3 + transition	100
Chem/BiochemFYE	Students, in cohorts, take several courses together	CHEM 120A + major courses (2 units + major units)	CHEM 120B + major courses (2 units + major units)	A3 + transition + major requirements	48
"Stand Alone" GE Courses					
ACE (Academic and Career Exploration)	Thematic living/learning communities; students, in cohorts, take several courses together	UNIV 102 + "interest course" (3-7 units)	UNIV 237 + "interest course" (3-7 units)	Combination of GE, major introductory, or pre-req major courses + transition and major/career exploration	350
EOP Academy	EOP students, in cohort groups, take several courses together.	UNIV 102 + ENGL 100A or ENGL 101 + interest course (number of units varies)	ENGL 100B (if necessary) + another interest course	A2 + another GE, plus transition	140

In Fall 2013, SSU implemented a Sophomore Year Experience Program (http://www.sonoma.edu/aa/us/sye/), supported by a CSU Student Success grant, that was designed to provide developmentally appropriate academic, social, and institutional support for second-year students. This grant supported the creation and regular assessment of a Sophomore Year Experience core course called "How to Think Like a Social Scientist" (now housed in GE Area E). Since the original course, faculty in Science and Technology developed Science 220, "Dream, Make, and Innovate," (also housed in GE Area E). The administrator of this course, Dr. Jeremy Quails, recently received an NSF grant to support further curriculum development and assessment.

In Fall 2014, A&H faculty developed the "Sophomore Year Research and Creative Experience" (SYRCE). Dr. Christine Renaudin spearheaded the effort and coordinates this A&H initiative. SYRCE is a constellation of 10 different A&H courses (AMCS 273, ART 273, CALS 273, COMS 273, ENGL 273, MLL 273, MUS 273, NAMS 273, PHIL 273, THAR 273) designed for second year students to fulfill the requirements of GE Area C2. These one-semester courses offer students a multi-disciplinary approach to a common topic based on the idea of a Time Machine set to a different past decade for each academic year. Throughout the semester, all 240 students attend a series of lectures in Schroeder Hall. These lectures are delivered by the ten faculty members involved in teaching the various sections of 24 students, who meet in weekly seminars to debrief said lectures, explore discipline specific material, and workshop research and creative projects focused on some aspect of the general topic. The SYRCE Time Machine seeks to foster collaboration, creativity, research, modeling, and mentoring among students and faculty in an effort to engage the whole student in all of us. The experience culminates at the end of the semester in a symposium held in the Green Music Center, where students showcase their accomplishments as part of a common final (http://www.sonoma.edu/ah/syrce/). Both students and faculty have shown remarkable enthusiasm for a model that is truly multi-disciplinary and actively walks the talk of collaboration across disciplines as well as across the student-instructor line, with all ten instructors sitting on Schroeder stage every Tuesday morning, listening to each other and supporting each other, modeling focus, listening, respect and responsiveness.

A new campus-wide SYE office works with faculty involved in all three courses to hire and train undergraduate peer facilitators, coordinate faculty professional development, and create sophomore-specific events and newsletters. In addition, Library faculty participate in the curricular design and delivery for all of these courses. These new opportunities are summarized in the Table 3. They serve about 650 of SSU's second year students.

Table 3. Sophomore Year Seminars, Spring 2017

Course Name	GE Area	Faculty Contact	# of students	Notes
SSCI 299 How to Think Like a Social Scientist	E	Michelle Jolly, email: Michelle.Jolly@sonoma.edu	75	2 to 3 sections offered every term
SYRCE Second Year Research and Creative experience	C2	Christine Renaudin, email: renaudin@sonoma.edu	240	10 sections of 24 offered every term
SCI 220 Dream, Make, and Innovate	E	Jeremy Qualls, email: quallsj@sonoma.edu	25	1 section offered every term

Additional Science Lab. The structure of SSU's Area B departs significantly from the CSU norm. SSU offers courses in four areas: B1 (Physical Science), B2 (Life Science), B3 (Specific Emphasis) and B4 (Math). Unlike other CSU campuses, laboratory activities are integrated into courses in areas B1 through B3 (see Appendix 1). This approach to laboratory courses provides an opportunity for all SSU students to actively engage in laboratory science practices as part of their content courses. Unlike other CSU GE programs, B3 Area courses are not defined as "laboratory" courses but as content courses that include computer science and engineering options.

Ethnic Studies Requirement. Ethnic Studies courses explicitly incorporate the voices of the groups being studied from a first-person perspective – an approach that research shows increases empathy and perspective taking. SSU pioneered the ethnic studies requirement within the CSU and was one of the first CSU universities to require an ethnic studies course as part of the GE pattern[2], an approach recently recommended by the CSU Task Force on the Advancement of Ethnic Studies.

3. Course Formats and Scheduling

Course Formats. SSU offers GE courses in formats that range from large lectures that meet once or twice a week to small discussion sections that meet three times a week. The various first year experience courses typically mix these formats. Students meet in a large lecture once a week, and break into small sections for additional weekly meetings. Most courses are 3 or 4 units, but over the past few years, more departments offer an increasing number of 1 unit GE courses. This variety allows departments to choose the unit load that meet their curricular needs, under the proviso that students should not take significantly more units than required by the GE curriculum.

As shown in Table 4, the distribution of CS Codes for courses in the SSU GE curriculum indicate that participation and discussion-based courses dominate the curriculum. In the sciences, (Area B) large lecture courses are much more common and closer student faculty contact occurs in the laboratory (CS Code 16) component of the courses, where enrollment per section is usually capped at 24 students. However, a closer examination of enrollments for different classes reveal that many of these courses exceed the number of students associated with their CS code.

[2] For a full report of ethnic studies in the CSU see: Report of the California State University Task Force on the Advancement of Ethnic Studies, January 2016 (https://www.calstate.edu/AcadAff/ethnicstudiesreport.pdf)

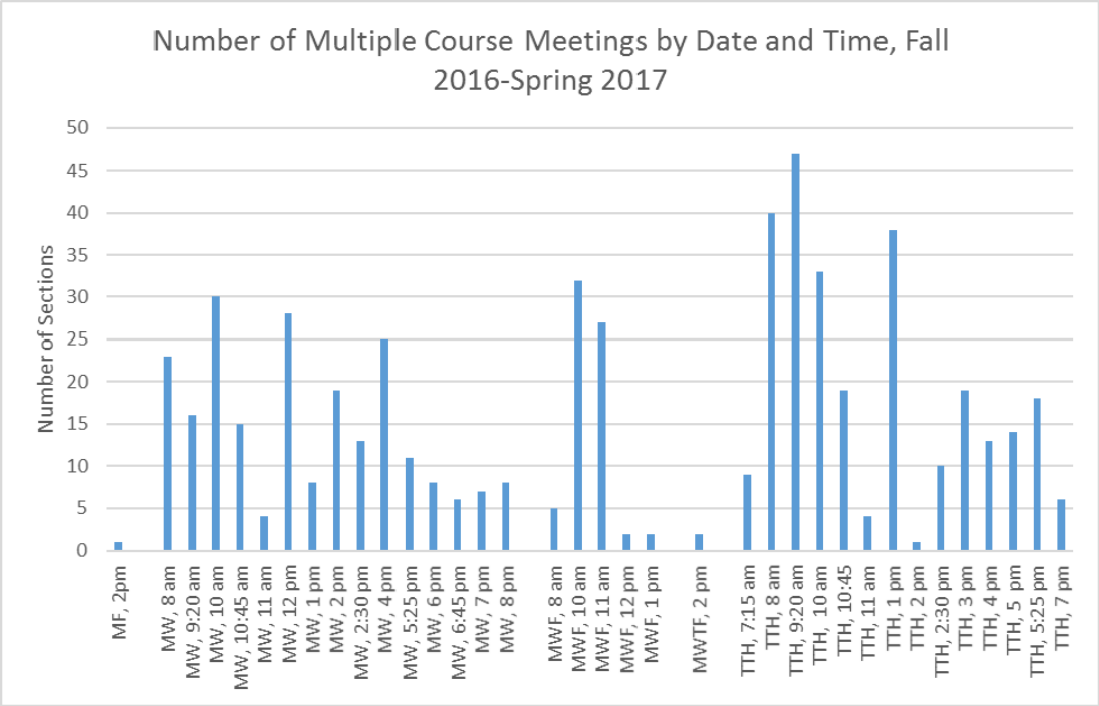
For example, many of the class sections offered in the C3 Area are more than 50 students. If a class size is more than 50 students, faculty will have a difficult time addressing their new oral communication learning objectives.

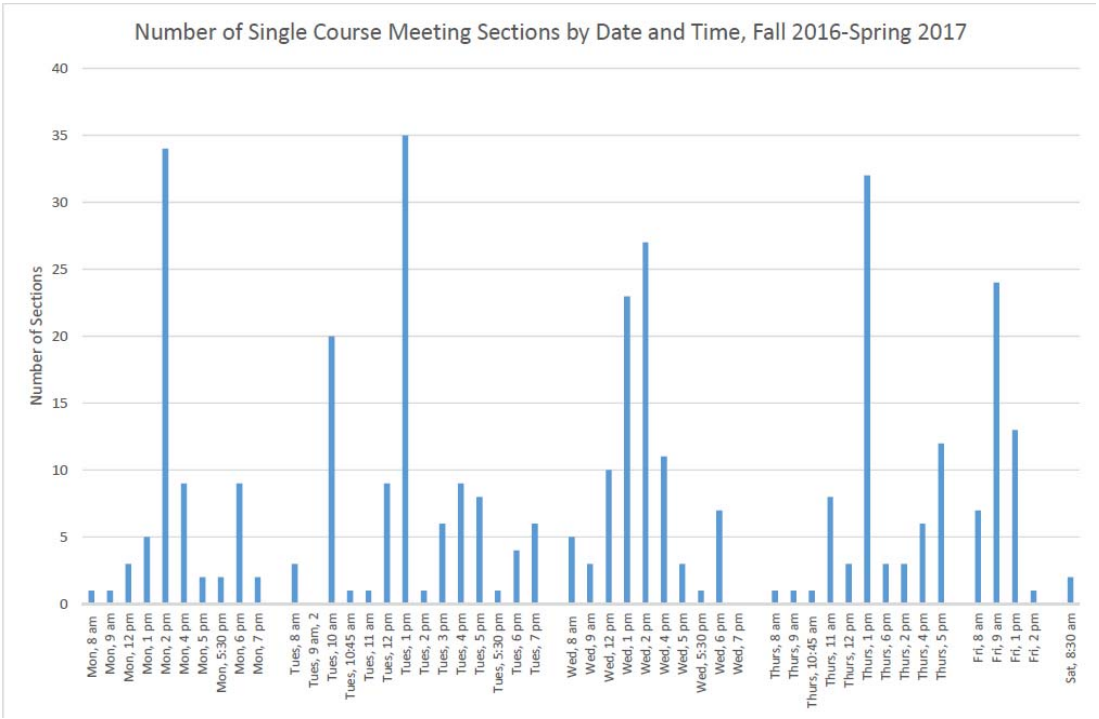
Table 4. Average number of sections with CS Code Distribution of SSU General Education courses, Fall 2014-Fall 2017

			Area				
CS Code	CS description	Examples	A	B	C	D	E
1	Large lecture	Lecture courses with > 50 enrollment	18.9	20.8	8.7	3.8	8.5
2	Lecture discussion	Lecture courses in which class participation is a planned portion of the instructional method	1.6	5.4	10.2	12.6	21.8
3	Lecture-composition, counseling, or case study	Business, education, English and psychology courses in which students write, are counseled, or study law cases	0	0	0	0	0
4	Discussion	Courses in which student participation is the primary instructional method	25.5	23.1	6.8	4.7	4
5	Seminar	Courses using seminar methods of instruction	0	0	4.7	0	6.5
7	Fine arts & science activities	Art, anthropology and science activities	0	0	0	0	0
12	Speech, drama & journalism activities	Classwork in debate, acting, and publication; no public performance involved	0	0	0	0	0
13	Technical activities & laboratories	Courses involving business and other machines; accounting, geography, foreign languages, home economics, psychology, library science, photography, engineering, industrial arts, agriculture, mathematics and statistics	0	0	0	0	0
16	Science laboratories	Laboratories in natural science, life science, psychology, natural resources, agriculture, engineering , meteorology, photography	0	5.2	0	0	0
36	Independent study, field work, studio instruction, supervised activities	Requires instructor work, studio instruction, to spend an average of 1 hr per week with each student.	0	0	2.2	0	0

Figures 1 and 2 show a weekly schedule of GE courses for the past academic year. Course start time was used as the basis for categorization. GE courses were taught throughout the day Monday through

Thursday, and relatively few courses were taught in the afternoon on Friday. The greatest 'clumping' of courses occurs at late morning on Monday-Wednesday and in mid-afternoon on Tuesday-Thursday. When students register for courses in the online registration system, they are blocked from registering for any new courses that conflict with their previously scheduled choices.





The average time per class session depends partly on course format and partly on number of units (see Table 5). Discussion sections for GE courses typically last 50 minutes, whereas laboratories last 170 minutes. Lecture times also vary. Some three-unit lecture courses are taught three times a week at 50 minutes each, but more are taught twice per week at 75 minutes per session, and several are taught once a week at 150 minutes. Four-unit lecture courses are also taught 1-4 times per week, but the average duration per session is longer than for three unit courses.

Table 5. Duration and Frequency of Class meetings by Unit Numbers, Fall 2016 – Spring 2017

Units	**No_Meetings**	**Duration**	**Frequency**
1	By Arrangement	NA	3
1	1	1 hr 20 minutes to 2 hrs. 40 minutes	23
		TOTAL	**23**
2	By Arrangement	NA	2
2	1	1 hr, 50 minutes	17
		TOTAL	**19**
3	By Arrangement	NA	4
3	1	2 hrs, 40 minutes	131
3	2	1 hr, 15 minutes	205
3	3	50 minutes	6
		TOTAL	**346**
4	By Arrangement	NA	4
4	1	3 hrs, 40 minutes	187
4	2	1 hr, 50 minutes	332
4	3	50 minutes	40
4	4	50 minutes	2
		TOTAL	**565**
5	1	50 mins to 1 hr, 50 mins	12
5	2	50 mins to 1 hrs 50	24
5	3	50 minutes to 1 hr, 50 mins	10
		TOTAL	**48**

These data indicate that a large number of GE courses are taught as a single two hour 50 minute or three hour forty minute class meetings. In some cases, this may be pedagogically necessary. Extended time allows instructors to experiment with innovative practices like flipped classrooms, hybrid online-in person lectures, and classroom activities. However, this choice also might occur because instructors, departments and programs are maximizing their scheduling flexibility. This trend should be considered when discussing the costs and benefits of changing the default unit number from three to four units. More units means more time in class and that demands classroom innovations to make the extra time useful.

It also is important to recognize that the number of undergraduates continues to grow (and the number of full time faculty has decreased), but SSU still has very few large classrooms. Therefore, there has been growing interest in offering online versions of GE courses (or encouraging students to find equivalent

courses offered online by other universities). One recent SSU transfer curriculum proposal included a plan for all 9 units of upper division GE units to be online. In general, online courses can offer the same academic rigor as in person courses[3], but the university should consider how many and what type of online courses best comprise an SSU student's GE experience.

Scheduling. SSU has a decentralized process for scheduling GE classes. Schools are given an overall FTES (full time equivalent student) allocation, and the School Deans decide how to meet the demand for GE within their Schools based on their target number. The Dean of the School of Social Sciences, for example, distributes "major FTES" and "GE FTES" targets among Departments. Departments decide what classes to offer at what size, as long as they meet their "GE target" within their FTES allocation. Because departments are essentially competing for GE resources, they are motivated to offer classes in timeslots popular with students. There has been some attempt to address this issue by asking departments to spread some of their offerings outside of these peak times and limiting access to popular modules.

SSU is in the process of rolling out a Degree Planner program that will enable students to enter their preferred path through GE and their major from their first semester to graduation. This will give departments more data to use in planning their GE offerings as they will be able to see projected needs for these courses many semesters in advance. We hope that this new software will allow for a much more strategic and streamlined use of university resources for mounting GE courses.

One perennial question is whether the GE program creates "bottlenecks" that prevent timely graduation. In an effort to determine the extent of this problem, the GE subcommittee examined 1) the reasons that students who filed for graduation did not complete their degree, 2) the type of GE courses that graduating seniors took during their final semester, 3) the number of students "waitlisted" for GE courses over the past ten years and 4) the percent of lower division GE course seats that were occupied by declared majors.

First, the subcommittee examined why students who filed a graduate application (starting from Spring 2012) did not "clear" the requirement as of Spring 2017. 127 students did not graduate because they did not complete the WEPT requirement. 524 students did not graduate because of other reasons (not enough units, major requirements, etc.). 22 students did not complete the GE ethnic studies requirement. Finally, as shown in the table below, 46 students did not complete GE courses in specific categories. It is important to keep in mind that these data do not capture the number of students who could not complete specific requirements within four years, only those students who as of Spring 2017, still have not graduated. Given the large number of students who did not complete the WEPT exam, the Writing Center has begun a pilot program to encourage faculty, in consultation with the writing center, to offer writing intensive courses that combine an upper division GE course with the appropriate criteria for meeting WEPT requirements.

[3] Online Courses - What is Lost, What is Gained and What about Something Called Rigor? Tomorrow's Professor Postings, https://tomprof.stanford.edu/posting/1385

Table 6. Number of students who did not graduate who still had the following courses to complete (Spring 2012 – Spring 2017).

Requirement	Total
A2. Fundamentals of Communication	2
A3. Critical Thinking	4
B1. Physical Sciences	2
B2. Biological Sciences	5
B4. Mathematical Concepts & Qu	3
C1. History of the Fine Arts,	3
C2. Literature, Philosophies,	3
C3. Comparative Perspectives	7
D1. Individual & Society	1
D2. World History & Civilization	4
D3. United States History	4
D4. U.S. Constitution & California	2
D5. Contemporary International	4
Science Lab Courses	2
Grand Total	46

Second, the subcommittee looked at the types of GE courses that graduating seniors took during their final semester. In general, there was no evidence that students took an unexpectedly high number of lower division GE courses (which would suggest that they might have been unable to take these courses earlier in their college careers). Still, these data do not allow us to distinguish between students who took a course to meet a specific GE requirement *outside the major* or for other reasons. Future extractions of these data should include this nuance.

Third, the subcommittee looked at the waitlist numbers that remained after final course registration during the past ten years. Again, there is no evidence for particularly large waitlists in any single GE area (including ethnic studies courses). In fact, many GE courses include additional students that exceed the original class capacity. In other words, many instructors appear to add students to their courses even though they are uncompensated for this additional work. Of course, this waitlist data could be misleading – students might simply opt to complete particular requirements on line or at a community college. For example, the number of students who register to complete an upper division ethnic studies GE courses through extended education continues to increase; even though our examination of waitlist data does not indicate this demand. Most important, these data represent the final registration data. It does not capture the number of sections opened after first registration in response to student demand for particular GE courses.

Fourth, the subcommittee examined the number of seats occupied by department majors in lower division and ethnic studies courses. On average, the percent of department majors in these courses is 14.8%. These data suggest that the absence of desired seats is not due to sections (at least for these courses) being limited to declared majors.

Subcommittee members regularly hear from students and faculty about the difficulty of finding courses that meet particular categories and unit numbers, but it is important to separate the passionate anecdote from general quantitative data. For example, one student complained that if an open upper division GE course meets at 8 am Friday morning, then it is as "if there are no open upper division GE seats available". However, these anecdotes also reflect the complexity of students' lives – their schedules might reflect the degree to which they have responsibilities and commitments outside of the university. In recent student survey data, we find that students who work more hours also report less access to courses they need or want (2014 Track the Pack). We also recognize that certain courses, like upper division ethnic studies courses, are especially impacted because these courses meet more than one GE requirement and cannot be taken elsewhere. But before we make any recommendations, the possible source of these anecdotes requires further study.

Structural Problems. A close analysis of the GE program reveals several structural issues. SSU is now unique within the CSU and Community College Systems in how it handles GE Area A1 learning objectives. This difference affects both native students who transfer from SSU to other CSUs, SSU students who decide to take GE courses at another college, and transfer students. If students transfer to another CSU, they are short one GE A area unit. This may become a point of confusion and frustration for the approximately 70 lower division students who transfer to other CSUs after their first year if they are not properly informed and advised. If students transfer to SSU, they often bring A2, A3 and C3 courses that are 1) short 1 unit for the category and 2) miss the full oral and written analysis component that SSU includes in the C3 category courses.

Because some community college GE equivalent courses, in particular, are three units, there is a structural mismatch between 3 unit courses and the numerous four unit courses included in the GE program. For example, transfer students can meet the Area C GE breadth requirements but with 11 units and not the required 12 units. To address this problem, A & H has created 1-unit Area C courses. This semester, the Art Department has obtained GE status for its 1-unit Art Lecture Series. The Music Department has expressed interest in developing a 1-unit course to accompany its 3-unit course that will encourage students to participate in instrumental or choral ensembles, or attend a concert series. A & H is also discussing collaborative opportunities with Associated Student Productions that would allow a student to attend a series of performances, submit reviews or response papers to the performances, and earn a unit of credit.

As a second effort to address the three unit structural mismatch, in 2012, the university adopted a GE seat ratio principle that requires that a minimum of 83.3% of the seats offered in GE categories D and E be three unit courses. Theoretically, students should take 30 units from within the 10 subcategories of Areas B, D and E (based on 3-unit courses). In addition, they should take 20 units within the 5 subcategories of Areas A and C (based on 4-unit courses). These units should equal 50. But if students take 4-unit courses in Areas B, D and E, they will necessarily take more than 50 units of GE, sometimes termed "unit creep." GE Subcommittee members designed this policy so that students could complete their requirements efficiently. However, the implementation of this policy has been difficult without regular data, administrative support and a way to manage a "cap and trade" policy among different departments and schools. Unfortunately, the curricular oversight of the GE program is separate from the allocation of sections and seats.

As shown in Table 7, 64% of the GE courses offered by the School of Social Sciences faculty who teach primarily in Areas D and E are three units. In contrast, 58.2% of the courses offered by the School of

A&H faculty who teach primarily in Areas A and C are four units. Note that all the School of Business and Economics GE courses are 4 units – even those that are offered in Area D. Although the unit target ratio of 83.3% is based on student seats, not sections, and does not factor in 1-unit course availability, the data in Table 7 raises concerns about whether students can complete the GE program as efficiently as intended.

Table 7. Number of GE courses by unit and School, Spring 2017.

School	Unit	GE section frequency	General section frequency*	% of courses in School
Social Sciences	1	1	47	2.13
	2	0	64	0.00
	3	61	95	64.21
	4	38	224	16.96
	5	0	2	0.00
Business/Economics	2	0	4	0.00
	3	0	12	0.00
	4	12	105	11.43
Arts/Humanities	1	5	133	3.76
	2	7	74	9.46
	3	37	115	32.17
	4	135	232	58.19
	5	0	16	0.00
	6	0	1	0.00
	10	0	10	0.00
Education	1	0	9	0.00
	2	0	32	0.00
	3	18	90	20.00
	4	0	56	0.00
	10	0	20	0.00
Science/Technology	1	11	140	7.86
	2	3	71	4.23
	3	50	163	30.67
	4	76	201	37.81
	5	14	17	82.35
	6	2	31	6.45
University Studies	1	0	31	0.00
	2	0	11	0.00
	3	8	8	100.00
	5	8	8	100.00

* General section frequency includes independent studies, research assistantships, thesis research, student teaching, nursing practicum, Hutchins interdisciplinary seminars and peer facillator/mentor credit.

4. GE Advising

Students at Sonoma State University obtain information about GE courses in several ways:

1. First year students receive initial GE advising at summer orientation through the Educational Mentoring Team Program (EMT). Students who choose to take University 102 (First Year Experience), a 3-unit freshman seminar, receive advising through the EMT program during their first year at the university. First year students who live off campus and do not sign up for any other FLCs are automatically enrolled in University 102.
2. Students who are in the various FLCs and HLCs are advised by peer mentors in the class during their first year on all aspects of planning their progress through GE.
3. Undeclared students are advised by the Advising, Career and EOP Center (ACE).
4. Declared students may receive GE advising through their department. They may be assigned to a particular faculty member, or they simply drop in and consult with an available faculty member.
5. In the School of Business and Economics, a departmental staff member advises Pre-business majors. Once they have completed pre-major courses, they are assigned to a faculty member for major and GE advising.
6. Experienced students informally advise newer students about GE courses and the program.
7. Students use the on-line degree audit and the GE Pattern checklists.
8. The Schools of Social Science and Arts and Humanities have a lower division school-based advisor to advise on GE.

None of these information are sufficient. ACE has professional advising staff but staff members are too few to effectively advise the many undeclared students on this campus. Expertise in GE advising at the department level is not distributed evenly across the campus. Training in GE advising is inadequate and many faculty resist what training there is because they do not see GE advising as a good use of their time given that it is not likely to be part of their disciplinary training. Some faculty are expert at advising GE given their experience in EMT or faculty governance and often serve as the informal GE advisor for their own departments and, in some cases, even for departments they are not part of. Conversely, there are faculty that do not do well at advising and often give out of date advice, especially given all the changes and innovations to GE that have occurred in the last few years.

Some schools, such as A&H have worked to solve this problem by creating a school wide academic advising center, which combines GE advising with career consulting and internship coordination all in one location[4]. The School of Business and Economics also has a pre-business staff advisor that provides business students with professional GE advising. In 2015, the School of Social Sciences received a 50% staff advisor for GE advising. The School of Science and Technology also had a split staff advisor until Spring 2017.

In 2010, SSU replaced its Degree Audit Report in Peoplesoft with the Academic Requirements Report (ARR), which is integrated into the student administration component of the university's common management system (CMS). All the GE patterns described above are reflected accurately in the ARR. In addition to this, course substitutions and waivers, which may have been granted to individual students, are reflected in the ARR. This system allows students to see their progress towards a degree with written and visual cues on the screen and allows them to make better decisions in choosing classes for

[4] Career Service Center, http://www.sonoma.edu/career/

their path through GE. Faculty Center Staff train new full time faculty in the use of the ARR in advising students as part of the New Faculty orientation and it has become an essential tool for student advising.

B. GE Curriculum Oversight Process

1. Executive order Framework

SSU is responsible for meeting all provisions from the Chancellor's Office regarding GE. In 2015, the CSU issued Executive Order 1100, which contains the current General Education Breadth Requirements (Appendix 2). The GE subcommittee is particularly attentive to two broad provisions. First, EO 1100 specifies subject areas (A-E), subareas, minimum units within each area and sometimes sub areas, and broad learning goals for each area (Appendix 2, Article 4). Second, EO 1100 mandates that students should be able to transfer to SSU from other regionally accredited non-CSU institutions without unreasonable loss of credit or time (Appendix 2, Article 5).

2. Coordination between SSU and the CSU regarding GE

Two formal communication channels exist between the CSU and SSU. First, a representative from the Provost's Office is SSU's administrative liaison with the Academic Affairs Division of the Chancellor's Office. SSU's representative on the Academic Senate CSU is a second conduit of information to the GE subcommittee.

The role of the GE Sub-committee within the SSU Faculty Governance Structure. The GE subcommittee is a subcommittee of the Educational Policies Committee (https://www.sonoma.edu/aa/ap/currdev/ge.html). Its charge from EPC encompasses all issues pertaining to the GE curriculum (http://www.sonoma.edu/senate/committees/ge/index.html). The GE Subcommittee addresses proposals for curricular reform as they emerge from the schools. Because faculty members in schools are best qualified to address pedagogical issues, the GE subcommittee focuses on the coherence of the curriculum as a whole and the goal of improving student learning through specification of learning outcomes and assessment of student performance towards those outcomes, regardless of course structure.

Voting members of the GE subcommittee include elected representatives from each of the seven Schools in the University and the student representative (selected by the ASB). Non-voting members include the Provost's administrative liaison, an EPC liaison, a Student Services Professional from Student Affairs & Enrollment Management, and a representative from Admissions and Records. These representatives are the primary conduit for communicating actions of the GE subcommittee throughout the Schools and University, and this often occurs through attendance at meetings of the School Council of Department Chairs.

4. Routing process and information distribution for GE issues

The GE subcommittee spends much of its time attending to three main duties: articulations with other campuses, GE Petitions, and monitoring minor changes to the GE curriculum. It follows procedures set

out in the Curriculum Guide[5]. The committee works to continuously improve and formalize the processes by which it handles its duties. For example, the GE subcommittee has modified or created new forms that stipulate routing procedures and requisite information for articulation approvals, petitions and curriculum changes. These procedures reveal how information concerning GE issues is communicated throughout the University.

i. Articulations**.** The GE subcommittee considers articulations for courses from other campuses to count towards SSU's GE program. The form elicits the following information and approvals (Appendix 6):

Information	Routing
a. Course Syllabus (content and texts)	1. SSU Articulations Officer
b. Learning Objectives	2. GE Subcommittee

ii. GE Petitions. GE Petitions allow students to request that non-GE courses they have already taken count towards their GE curriculum. These are particularly common for transfer students and for students who have studied abroad. The GE Petitions require the following (Appendix 7):

Information	Routing
a. Description of SSU course to be substituted	1. Student advisor
b. Syllabus of new course	2. Evaluator in Admissions and Records
	3. Chair, GE Subcommittee *Optional consultation with Department chair in which original course is housed* *Optional consultation with GE subcommittee*
	4. Associate Vice Provost, Academic Programs

iii. Minor Changes to GE Courses. Minor changes include changes to a title, and temporary changes to units or content. Faculty initiating minor changes in their GE courses fill out a Master Catalog Course Change Form, and check the box indicating that the change will impact GE. The form then takes the following route:

Information	Routing
a. Description of the change	1. Department Chair
	2. School Dean
	3. GE subcommittee Chair *Optional consultation with GE subcommittee*
	4. Chair of Educational Policies Committee (EPC) *Optional consultation with EPC*
	5. Associate Vice Provost, Academic Programs

iv. New GE Courses and Major Changes to existing GE courses. Major changes entail alterations to course content and a permanent change in units. Faculty fill out a GE Course proposal (Appendix 8):

Information	Routing
a. Master Catalog Course Change Form	1. Department Chiar
b. Proposed catalog copy	2. School Curriculum Committee
c. Course Syllabus (content and texts)	associated with any course offered in the

[5] Quick Guide to Sonoma State Curriculum Change Processes
https://www.sonoma.edu/aa/ap/currdev/curric_change.html

d. GE related learning objectives d. Description of how the course will be structured and staffed, and projected enrollment	relevant GE area 3. School Dean 4. GE Subcommitee 5. EPC 6. Associate Vice Provost, Academic Programs

The current course proposal form emphasizes the importance of widespread consultation to facilitate curricular change. The Subcommittee decided in 2007 to refrain from constructing the routing in such a manner as to give schools veto power over proposals originating in other schools.

The GE subcommittee in consultation with the course proposer can recommend that the course be taught as experimental or become a permanent part of the GE curriculum. After instructors have taught an experimental course once or twice, the subcommittee encourages them to return to the committee to discuss what worked and what did not. At that point, experimental courses can become a permanent course or not.

Between Fall 2011 and Spring 2017, the GE subcommittee approved 60 new courses. Twenty four of these courses were part of the 2012 restructuring of A & H A2, A3 and C3 courses from three to four units described in Table 1. These changes necessitated much work from faculty who submitted course modification proposals that outlined how the new learning objectives would be met. All of these proposals had to be routed through the Arts and Humanities Curriculum Committee and then to the GE subcommittee. Every course in area A and C was reviewed because many of these courses were moving from 3 to 4 units and most faculty had not taught these courses with the new learning objectives before. The GE subcommittee wanted to make sure the content was being added and not ignored. This process was quite intensive and a number of proposals needed to be sent back for revision until they were all acceptable. In general, subcommittee members frequently ask course proposers for more information and modest changes. Since 2009, the committee has rejected just one Engineering course.

Chapter 2 - ASSESSMENT OF GE COURSES

A. Assessment Efforts in the GE program

In 2003, the Academic Senate adopted four general GE program objectives; 1) acquire a foundation of intellectual skills and capacities, 2) develop social and global knowledge, 3) understand and use multiple methods of inquiry and approaches to knowledge and 4) develop capacities for lifelong learning (see Appendix 9). In addition, during the spring and fall of 2008, SSU faculty developed learning objectives for each of GE areas (Area A, B, C, D, E) and all of the sub-areas (A2, A3, B1, B2, etc). These were approved by the GE Subcommittee, the Educational Policy Committee (EPC), and the Academic Senate (see Appendix 1).

The GE subcommittee hoped that adding the GE learning objectives to the syllabi would help students make sense of how GE fit into their undergraduate education. However, as shown in Table 1, a preliminary review of syllabi from Fall 2015 and Spring 2016 suggest that the presentation of these learning objectives is not as consistent as we would like. One problem is that the overall program goals and objectives are located on one webpage (http://web.sonoma.edu/aa/ap/currdev/ge.html#newge) and the area goals and objectives are located on another webpage (http://web.sonoma.edu/senate/committees/ge/LGOs_new.html). We suspect that it is unclear to many instructors what goals and objectives are relevant to their course and which are not.

Table 1. Percent of submitted syllabi that included relevant goals and objectives.

	Listed sub-area objectives	Listed overall GE objectives	Listed other learning objectives	Listed no objectives
Percent	15.2% *(42)	4.7% (13)	41.3% (114)	38.8% (107)

Note. This is based on the 276 syllabi shared with the committee in Summer 2016. (https://drive.google.com/open?id=0B8WaGwzaw9puTGlSZ0o0MWJ3a2c), and includes multiple sections taught be the same instructor.

GE subcommittee members also hoped that clear learning objectives would guide departments in the assessment of their GE offerings as part of their own department program reviews. The few individual course assessments of direct student learning included in program reviews suggest that students do learn what the faculty intend. For example, faculty in the Geography and Psychology departments have assessed the extent to which students in their classes can apply course material to their own lives (a GE D area learning objective). The instructors of Psychology 325, Social Psychology, employ a course embedded final assessment that invites students to apply and explain course concepts to a story of two SSU undergraduates. A recent comparison showed that students who took the course scored an average of 18 out of 20 points (90%) in comparison to an average score of 4 out of 20 points (20%) for a set of students who had not taken the course. The instructor of Geography 206, Society, Environment and Sustainable Development used a food related carbon emissions tracker to evaluate the extent to which undergraduate students' choices changed over the semester. And a close examination of a cumulative final exam from Geography 201, Global Environmental Systems, indicated that most students met the overall GE course objectives but found a full understanding of the lithosphere challenging.

The Hutchins and Early Childhood Development majors include GE reflections as part of students' senior portfolios, and these GE reflections suggest the degree to which some GE courses and faculty impact students' engagement, growth, and learning. The Early Childhood Development reflections also reveal two intriguing patterns. First, almost every student could describe a GE course that they found meaningful and relevant. Second, many students mislabeled courses that they took as an elective outside their department as a GE course.

But again, GE assessment as part of department program reviews has not been as consistent as the GE subcommittee hoped (see https://www.sonoma.edu/aa/ap/pra/program_review_sched.html for access to recent program reviews).

B. Cross Department Assessment of GE Learning Objectives

Faculty across departments have attempted to assess GE student learning objectives in four different ways. First, faculty who taught GE B1 courses assessed the degree to which GE area B1 course syllabi captured the B1 course objectives. Second, faculty who participated in the first year composition course (which earn GE credit for the A2 area) reviewed first year students' annotated bibliographies to determine students' degree of information literacy. Third, faculty who taught in the first year experience University 150 program (which earns A2, A3 and C3 GE credit) used a common rubric to evaluate a discussion map and students' final oral presentation as an indication of whether students achieved proficient levels of oral communication competency. Fourth, faculty involved in Science 220 and SSCI 299 (which earn GE area E credit) tracked students' persistence and commitment to their respective majors as one indication of their general academic engagement. SSCI 299 faculty also evaluated students' ability to evaluate social science research and propose new questions as evidence for both general critical thinking skills and the social science reasoning skills associated with GE area D and E courses.

1. Review of GE B1 course syllabi

As a first step of a five year assessment plan first proposed and approved by relevant curriculum committees in 2009, a group of senior faculty who regularly teach in the GE B1 subarea were recruited to assess syllabi. Workshops were held for these faculty who then built a rubric that would be used in the assessment. To facilitate the assessment, the GE Subcommittee developed a web-based interface for all the faculty teaching in the B1 Area so that they could report the results for their individual classes. This system for reporting results was then taught to all the faculty teaching in the B1 subarea through a workshop. These faculty taught their courses and then reported the assessment results for their Fall 2010 courses.

This data was then summarized and reviewed by the GE subcommittee and reported to the B1 subarea faculty. This data was reviewed by the faculty and they used the results to facilitate discussions amongst themselves on how to improve their results in teaching this GE subarea. This pilot also allowed the faculty to provide input to the GE subcommittee on how to improve the assessment process.

However, after this initial project, GE subcommittee members opted to discontinue the focus on area and subarea assessment in favor of a focus on the fundamental competencies viewed by CSU colleagues and WASC accreditation teams as more directly relevant students' learning. These core competencies in

oral and written communication, critical thinking, quantitative reasoning, and information literacy are reflected in both the general GE program objectives and objectives for individual categories.

2. Information Literacy and Oral Communication assessment efforts

SSU faculty and staff drew upon CSU and national conference participation to identify "communities of practice" and design an assessment of the learning objectives that these communities teach. Faculty first focused on Oral Communication and Information Literacy. Faculty who were identified as belonging to the communities of practice that taught oral communication and information literacy met and shared ideas for the best practices in teaching tand assessing relevant learning objectives. Because there are already courses that are taught by teams of teachers such as FYE or the Humanities Learning Communities, these were thought of as the natural place to start these efforts.

Assessment of Information Literacy. SSU's Freshman Year Composition (FYC) courses, stand alone courses that meet GE Area A2, include the Information Literacy student learning objective. In the Spring of 2011, the SSU Library and the English Department's Composition Coordinator conducted a holistic assessment of first year students' research papers. The results of this review concluded that freshmen were not engaging with research sources but instead just tried to finish the paper without paying much attention to where they were getting their research material from. Many students have problems understanding how, or when, to cite sources and in determining the veracity or value of the sources cited.

This assessment lead to some changes in the way Information Literacy was taught to these students. The major changes in the curriculum included a much more active role for the Library in helping to teach this learning objective. Students now meet with librarians who lead them through some exercises where they are tasked with assessing the credibility of the author(s) of the material they cite. Additionally, they are given tools to help them learn how to assess the quality of the sources they want to use. For example, students would compare the results of Google searches to those conducted using peer reviewed journals. Students also create a large annotated bibliography instead of learning to use different information search tools. These methods are now a permanent addition to the way that the Library assists in Freshman composition.

Two librarians assessed this program again in the Spring of 2012. They collected completed annotated bibliographies form various sections of English 100B. The assessment was supposed to cover 17 sections or 47% of all of ENG 100B students, but by the end of the semester, only 8 sections or 22% of all English100B students completed the assessment. Unfortunately, differences in the way that faculty approached the assignment made the use of a common rubric for assessment difficult and perhaps too ambitious.

Library faculty made further changes to the 2012 and 2013 assessments. These changes focused on providing the faculty with much more guidance in how the assignment would be assessed and gave them a role in collaborating on the assessment process. Unfortunately, the librarians involved in these efforts have left SSU. Faculty also discussed whether this course was the best place to assess this learning objective.

3. Assessment of the Oral Communication Student Learning Objective in the SSU FYE Program

The Faculty in the FYE program are committed to assessing oral communication through two common assignments given in all nine sections of FYE: 1. Performance in weekly seminar discussions during the Fall and Spring semesters and 2. A comprehensive individual oral presentation in the spring semester.

A tool called the "discussion map" is used by each instructor to track each student's performance in the weekly seminars. These maps offer fine-grained information on the student's contributions, frequency of comments, and to whom the comments are being directed. At the end of the year, each instructor takes this data and compares it to a rubric based on the Oral Communication VALUE rubric from the AAC&U, which is used to determine the competency level attained by each student.

A similar rubric is used to assess each student's performance in the final oral presentation that each student gives in the Spring semester.

4. Assessment of the Science 120

SSU Science and Technology Faculty used seed money from the National Science Foundation to create a year long, inquiry based, 12 unit academic learning community for students interested in science, technology and engineering (STEM) majors. Students earn general education credit for a set of multi-disciplinary courses that focus on water and sustainability. They work with community partners that included the Sonoma County Water Agency, Resource Conversation Districts and the SSU Preserves on joint investigations and experiments. Recent analyses show that Science 120 students were three and half times more likely to enter a STEM major one year after the class in comparison to a set of students with similar academic records who did not participate in this program. Eighty percent of the students in this program who entered SSU as a declared STEM major in Fall 2015 continued the major in their sophomore year (in comparison to 70% of other first year declared STEM majors). Faculty also assess student learning in this program with a rubric based measure of students' final public poster presentations.

5. Assessment of SSCI 299

A CSU success grant enabled the School of Social Sciences faculty to assess student learning in the School of Social Sciences sophomore seminar course in several ways. First, during the pilot year, faculty randomly assigned any student who expressed an interest in the course either to the seminar or a waitlist for the next term's seminar. By randomly assigning interested students to take the course or wait until the following semester, faculty could determine the extent to which any changes reflected the class and not other variables (like student motivation to participate).

Faculty designed the course to improve students' research skills (GE program objective 1b,) write and speak effectively to various audiences (GE program objective 1c), work collaboratively (GE program objective 1f), translate problems into common language (GE program objective 1g)., and understand and appreciate historical and social phenomena (GE program objective 3c). As one test of course effectiveness, at the end of the semester, all participants read a short opinion piece about possible generational differences between older and younger Americans from the New York Times (Leonhardt,

June 22, 2012)[6]. Faculty asked participants to 1) identify the author's main point or thesis and any supporting evidence, 2) note the advantages or disadvantages of presented evidence, missing evidence and the background of any experts mentioned, and 3) suggest questions that they would ask if they were a social science expert. Seminar participants' responses (as coded by two faculty members blind to the experimental condition) wrote better essays in comparison to the waitlist control participants. However, their performance on a short methods quiz was not any better than the performance of waitlisted students. Faculty suspected that these results reflected the limitations of a one unit course. Therefore, SSCI 299 is now a three unit GE area E seminar course.

Faculty no longer use an experimental design to assess student learning, but they continue to collect pre and post test data. Data from the three unit seminar course show that students' performance on the methods quiz improved significantly over the course of the semester. In addition, as an initial test of whether the seminar meets the GE E area objectives, faculty and students are coding students' reflection papers for evidence of focused academic and career exploration.

Faculty also compared the percentage of SSCI seminar students who returned to the university for their third year with the percentage of university students who typically return to the university for a third year. Of the students who completed the seminar, 85.6% returned to the university in comparison to an average of 71.8% of students who returned to the university during the past five years when no seminar opportunity was offered (2009-2013, Institutional Research Reporting and Analytics Webpage).

[6] Leonhardt, David. Old vs. Young, New York Times Sunday Review. June 22, 2012. http://www.nytimes.com/2012/06/24/opinion/sunday/the-generation-gap-is-back.html

Chapter 3 - ACTION ITEMS for General Education

Faculty, staff, and administrators agree that the SSU GE program should be coherent, relatively simple and clearly communicate why a broad liberal arts and sciences curriculum is important. They also agree that the current GE program is not fully serving students.[7] The categories and subcategories in the GE pattern and the way courses fit into the pattern can be confusing to students and advisors. Anecdotal reports indicate that many students advise themselves and therefore do not follow the most efficient or academically relevant paths. Students often report that they choose courses that fit their schedule rather than what interests them. Therefore, it is not surprising that some students resist "GE" classes because they do not want to be there and they believe that their time and money is wasted on courses outside their major.

Some campus working groups are studying the possibility of adding directed pathways through GE so that students will see how GE learning objectives are connected to their academic interests. For example, a special minor in Science, Technology and Society would allow science majors to explore how other schools and departments on campus interact with science in a meaningful way. Students who competed these special minors through GE would have it noted on their transcripts. Students would work toward a tangible goal, and they would see GE as allied to their studies as opposed to a series of arbitrary graduation obstacles.

However, GE change is difficult. Despite ambitious plans proposed in 2003 (the GE pathways model, see Appendix 10) and 2009 (a five year plan for assessment of GE student learning), progress has been slow for two reasons. First, staffing and curricular decisions are distributed across programs and departments. Given their limited resources, departments prioritize their major curriculum, often at the expense of GE courses. Many departments depend upon large(r) GE courses to subsidize their major curriculum (and therefore, are reluctant to entertain any changes to the GE curriculum that might reduce their number of seats). Other departments with high unit requirements are motivated to make the GE program as efficient as possible (and therefore, prefer some major or school courses that can serve as both major pre-requisites and meet various GE requirements). Second, there is no faculty or staff person for whom the GE program is their primary responsibility. Curriculum assessment and development is left to individual departments and programs, and there are no mechanisms to insure that regular institutional research data about courses and assessment are shared with the GE subcommittee. Adequate personnel and data are needed before the campus can embark on substantial changes to the GE program. It also is critical to recognize the extent to which GE courses are intertwined with majors and programs. Therefore, any changes to the current GE program requires planning, support and inclusion of all affected faculty, staff and students.

Based on this review, the GE subcommittee recommends the following:

1. Provide adequate faculty and staff support for the GE subcommittee (a recommendation made by the 2009 external reviewer). Currently, the committee chair (and members) are expected to review all GE course substitution requests, all GE relevant new and modified courses, assess the program's effectiveness, request and analyze relevant institutional data, update catalog copy, website and other materials, propose and vet GE relevant policies, and monitor the ratio of three to four unit seats in categories D and E. Given the lack of time and resources given to this

[7] Based on numerous curriculum meetings, the 2016 and 2017 faculty retreats, meetings with various constituencies during the May 2017 external review and responses to an online questionnaire.

committee, it is no surprise that so little progress has been made. We recommend that the university consider an appointment of a respected faculty member to serve as a General Education director, release time for the chair, and targeted staff support.

2. Enact all necessary policy changes to bring the SSU GE program in compliance with the 39 unit lower division transfer program. Students who complete the appropriate lower division GE program at California community colleges or other CSUs should only need to complete 9 units of upper division GE when they arrive at SSU.
3. Protect and support ethnic studies as an "overlapping" requirement of the SSU GE program.
4. Protect and support the year long blended courses such as A & H's HLCs and the FYE program that are designed for first year students. These courses are an innovative and effective way for students to meet GE requirements, develop important interpersonal skills during the first year transition and find their passion.
5. Protect and support new second year seminars that are designed to serve second year students. These courses are creative and effective opportunities for second year students to focus their academic and personal development.
6. Develop an assessment protocol that provides direct measures of student learning across courses in a way that respects faculty time and goals. Reconsider whether the current approach to house GE course assessment as part individual department program reviews works. Include a request for an assessment plan as part of the modification and new course protocols.
7. Adequately fund course sections that are regular bottlenecks for graduation (e.g., upper division ethnic studies courses). We should find ways to hire more faculty to add more sections of the quality courses we already have. Many staff members also recommended that SSU offer internet-based versions of such courses.
8. Support and reward "prototype" curricular possibilities for small numbers of students that could be scaled up **after** proper assessment. One possibility might be the Science, Technology and Society minor described earlier. Alternatively, the 9 unit upper division GE requirement offers a unique opportunity to offer a distinctive GE education. For example, faculty could design interdisciplinary prototypes that blend GE requirements across categories and include a capstone assessment.
9. Empower a small task force to review and revamp how students find courses on PeopleSoft and other web presentations of GE courses. We also recommend that the GE materials be redesigned to emphasize the philosophy, goals and objectives of the program (as opposed to completing specific unit distributions). This redesign is an opportunity to highlight unique co-curricular and curricular opportunities associated with the program.

A. Summary

Sonoma State University has the seeds for an innovative and interdisciplinary GE program that can change and grow with our students. SSU has met the challenge of GE through its stated Mission, Goals, and Objectives statements and its process of evaluating new GE course proposals. SSU also has made substantial changes in its assessment practices. In 2009, there were no goals, objectives or methods for assessment. Now, increasing numbers of faculty are trying various ways to assess the effectiveness of GE courses.

As the only CSU member of COPLAC (Council of Public Liberal Arts Colleges, https://coplac.org/), we are committed to providing undergraduates with a true liberal arts and sciences education. The Hutchins liberal arts portfolio program, the ethnic studies requirement, the integrated science laboratory and the

year long first year blended courses illustrate the innovative and creative ways that we can educate students. We look forward to continuing this tradition.