

FULLERTON COLLEGE

ELEVATING EXCELLENCE.

Instructional Programs

2017-2018 Self-Study

Three-Year Program Review

Geography

Social Science Division

GEOGRAPHY

...is the holistic study of the Earth's surface and the interrelationships of its human and physical features. Its interdisciplinary nature bridges the social and natural sciences. As a discipline, geography is paramount in understanding a world that is increasingly globalized - a phenomena that compel greater understanding of places, people, and natural systems that affect us as a planet and as global citizens.

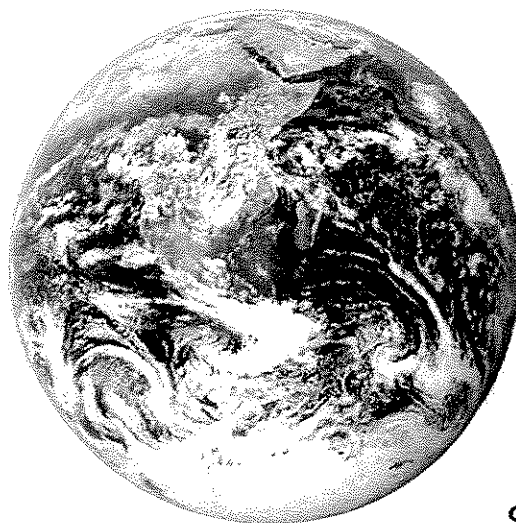
WHY MAJOR IN GEOGRAPHY?

The opportunity to make a difference in the world is one of the most frequently cited reasons people choose geography. Geographers are highly employable due to their analytical and critical thinking skills. The rise of geospatial technology has only amplified job opportunities.

GEOGRAPHERS ARE IN HIGH DEMAND

- Job prospects for geographers are rising much faster than national average growth (AAG).
- There are over 90 occupations related to geography (AAG).
- The majority of geographers work for the federal government. The remainder are employed in engineering services (as GIS analysts), local governments, and in higher education (US DOL, 2017).
- The median annual salary for geographers is \$74,260 (and as high as \$102,930) (US DOL, 2017).
- Geographers are amongst the least likely to be unemployed (HESA, 2017).
- Geospatial technology is one of the most important emerging technological fields (AAG).

GEOGRAPHY HELPS UNDERSTAND PHYSICAL AND HUMAN PROCESSES THAT SHAPE THE WORLD AND EVERYDAY LIFE



GEOGRAPHY COURSES AT FULLERTON COLLEGE

GEOG 100 GLOBAL GEOGRAPHY

(3 CSU/UC units, IGETC SS)
Learn about pressing global contemporary issues through regional geographical analysis

GEOG 102 & 102L PHYSICAL GEOGRAPHY & LAB

(3 CSU/UC units, IGETC PS)
Learn about Earth's landforms, climates, biomes, and the physical processes that shape them

GEOG 120 GLOBAL ENVIRONMENTAL PROBLEMS

(3 CSU/UC units, IGETC elective)
Learn about the causes and consequences of contemporary environmental problems

GEOG 130 GEOGRAPHY OF CALIFORNIA

(3 CSU/UC units, IGETC elective)
Learn the physical and cultural geography of the golden state and its contemporary environmental and social issues

GEOG 160 CULTURAL GEOGRAPHY

(3 CSU/UC units, IGETC SS)
Learn the processes driving population, urbanization, development, and other geographical patterns of the human world

GEOG 230 GEOGRAPHIC INFORMATION SYSTEMS (GIS)

(3 CSU/UC units, IGETC SS)
Learn how to retrieve, store, display and analyze spatially referenced data through the widely adopted ArcGIS software

Statement of Collaboration


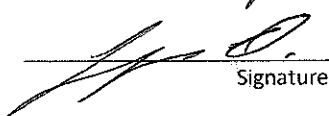
The program faculty listed below collaborated in an open and forthright dialogue to prepare this Self Study. Statements included herein accurately reflect the conclusions and opinions by consensus of the program faculty involved in the self-study.

Participants in the Self-Study

Aline Gregorio
Ruben Lopez
Susie Grabiell

Authorization

After the document is complete, it must be signed by the Principal Author, the Department Coordinator, and the Dean prior to submission to the Program Review Committee.

<u>Aline Gregorio</u> Printed name of Principal Author	 Signature	<u>Assistant Professor</u> Title	<u>12/14/17</u> Date
<u>Susie Grabiell</u> Printed name of Department Coordinator	<u>Not Available for S.S.</u> Signature	<u>Professor</u> Title	<u>12/14/17</u> Date
<u>Jorge Gamboa</u> Printed name of Dean	 Signature	<u>Interim Dean, Social Sciences</u> Title	<u>12/14/17</u> Date

1.0 Mission and Goals

The College's Mission, Vision, Core Values and Goals drive all college activities. The Program Review committee would like to understand the connection of your program to the College's Mission, Vision, Core Values and Goals. Summarize how your program supports each area.

Mission:

The Geography Department ***advances student learning and achievement by developing flexible pathways for students from our diverse communities who seek educational and career growth, certificates, associate degrees, and transfer*** by

- Offering courses with relevant subject matter that equip students with a better understanding of the physical and human processes that shape the contemporary world and its challenges.
- Offering courses that fulfill GE transfer requirements to 4-year institutions, Fullerton College's diversity requirement, and/or fulfill the requirements for the Geography AA and AA-T.
- Incorporating transferrable skills, such as critical thinking, data analysis, research, and writing in course design.
- Engaging students in multiple forms of learning including lecture, videos, discussion, research, reading, writing, and online and field experiences.

The Geography department ***fosters a supportive learning environment for students to be successful learners, responsible leaders and engaged community members*** by

- Offering courses that equip students to make informed decisions. Our geography courses:
 - Emphasize the importance of inquiry and learning and instill appreciation of the different ways in which people have adapted to their socioeconomic and environmental contexts
 - Exercise students' spatial-analytical skills that enable them to identify the qualities and interconnections of places at local, regional, and global scales
 - Explore the causes and consequences of the pressing social and environmental issues
 - Analyze the prospects, challenges, and applicability of existing solutions to pressing social and environmental issues
 - Utilize an analytical and empirical framework, where students learn to seek, interpret, and gauge sources of information in order to understand the world objectively
- Supporting and engaging students beyond the classroom:
 - by providing extracurricular learning opportunities such as guest lectures, film screenings, geography symposiums, interdisciplinary summits and conferences
 - by exposing students to supporting resources existent on campus
 - through advising student organizations and student-led initiatives
 - by providing a virtual platform for the students and community to connect with department faculty

Vision:

The Geography Department ***transforms lives and inspires positive change in the world.***

- A geography education equips students to better understand some of the world's most pressing issues. Geographers adopt an empirical framework to study climate change, population, natural resources, environmental justice, deforestation, wildlife trade, economic development,

sustainability, natural disasters, social inequality, regional and global conflict, agriculture, emigration and immigration, economic and cultural globalization, among other relevant topics. This education results in a transformative awareness that empowers students to inspire positive change. Students who acquire a geographical perspective are able to see themselves as global connectors and units of change and often assume accountability in the role of their individual decisions in this increasingly globalized world.

Core Values:

Responsibility – We accept our responsibility for the betterment of the world around us.

Geography as a discipline is geared for the betterment of the world. Geographical studies expose factors that promote and hinder human development and emphasize on the power of human ingenuity in overcoming environmental and social contexts. Furthermore, our faculty creates and participates in campus and community events that promotes solutions to contemporary problems and paves the way for a brighter future (examples listed below).



Climate Change Symposium, spring 2017. [From left to right] Ruben Lopez (Geography), Mohammad Abdel Haq (Sociology), Dr. Glenn MacDonald (UCLA Geography), Aline Gregorio (Geography), and Susie Grabiell (Geography) collaborated in this symposium.

Partnership – We work together with our educational and community partners.

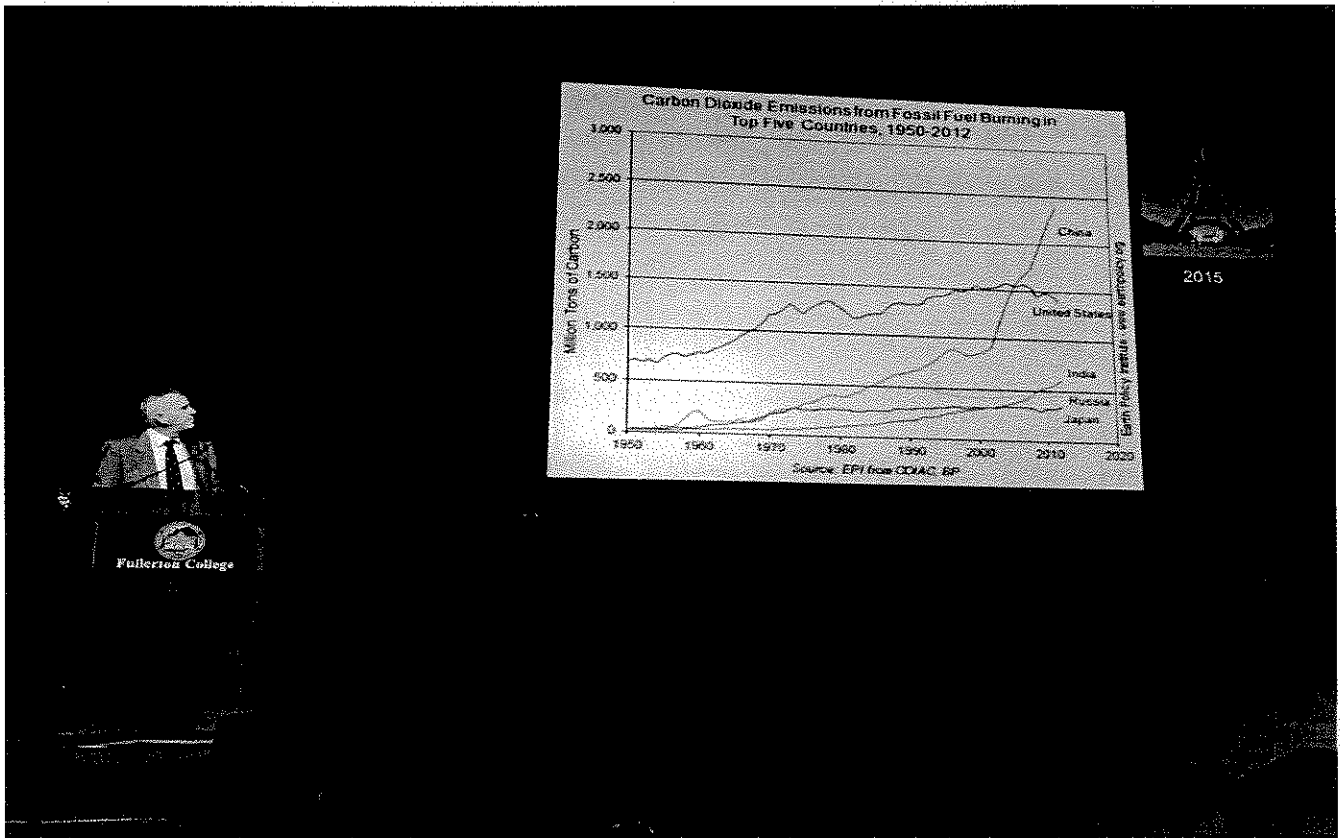
Community - We promote a sense of community that enhances the well-being of our campus and surrounding areas.

Courses in geography are taught through an empirical framework that emphasizes rational analysis and empirical evidence. Information-based understanding is the foundation of decision-making that fosters wellbeing in our campus, community, and world at large.

The geography department engages the students beyond the classroom by organizing/participating in campus/community events and partnering with individuals and organizations that enhances the wellbeing of our campus, community, and world at large. Examples include:

- *Making Sense of the 2016 Election Results – Fall 2016 (see flyer in appendix)*
 - Faculty panel featured Fullerton College professors Jodi Balma (Political Science), Mohammad AbdelHaq (Sociology) and Aline Gregorio (Geography) explaining the different factors that led to the rise of Donald Trump. Professor Aline Gregorio explored how globalization and the deindustrialization of the Midwest fueled the election results

- *Climate Change Symposium – Spring 2017 (see flyer in appendix)*
 - This symposium brought climate expert Dr. Glen MacDonnald, the John Muir Memorial Chair and Distinguished Geography Professor at UCLA, to share his expertise and latest climate science. This event also showcased a faculty panel featuring Fullerton College professors. Professor Mohammad Abdel Haq (Sociology) explored the varying social perceptions of climate change. Professor Ruben Lopez (Geography) explored the emerging crisis of climate refugees. Professor Aline Gregorio (Geography) explored the impacts of the consumption of animal products in a warming planet. The symposium was concluded with a screening of the award winning documentary “Before the Flood” which explored the political, social, and environmental facets of the issue.
- *“Who Made My Clothes?” Booth – World Fest, Spring 2016 and Ethnic Studies Summit, Fall 2017*
 - Geography students join the global movement for a Fashion Revolution by exposing the big fast-fashion brand and their hidden globalized practices that are polluting the planet and exploiting people. In this info booth students engage the campus community in asking big fashion brands “who made my clothes” in various social media outlets.
- *Associated Students for UNICEF & Students for Equitable Sustainability (SES)*
 - Geography faculty, Aline Gregorio and Ruben Lopez, advise and co-advise these student organizations that promote environmental and social wellbeing at local and global scales.
- *Fullerton College Food Drive – Fall 2016 & Fall 2017*
 - The geography department and students periodically participate in the campus food drive to help deserving families in need



[Above] *Climate Change Symposium, Spring 2017*: Dr. Glen MacDonnald, John Muir Memorial Chair and Distinguished Geography Professor at UCLA, lectured on the science behind climate change.

Diversity - We embrace and value the diversity of our entire community.

Equity - We commit to equity for all we serve.

Geography is the study of people and places and their interactions around the world. A geography education ingrains an understanding and appreciation of the diversity of cuisines, customs, languages, religions, socioeconomic and sociopolitical forms that exist in our community and world.

Geography faculty adopt practices that are inclusive of students' voices and experiences by utilizing a diversified teaching approach that utilizes discussions and participatory learning. Furthermore, geography faculty are involved with variety of interdisciplinary campus activities which support and celebrate cultural diversity and equity. This commitment is illustrated above (pg. 3-4) and through the participation of following:

- *Islamophobia in Politics - Fall 2016:* Geography faculty collaborated with the Sociology Department to host a guest speaker who helped students reflect on the mainstream narrative in the US regarding Muslims. This awareness helps build tolerance and appreciation of a religious minority that is consistently demonized by the western world.
- *Dia de los Muertos – Fall 2016, Fall 2017:* Geography faculty united with the campus community to honor the deceased in this traditional celebration.
- *Worldfest – Fall 2016* engages the campus and community in an annual celebration of Earth and its diverse peoples. The Geography Department held a “Who Made My Clothes” info booth to bring awareness of the environmental and social injustices intertwined with clothing production.
- *Pluralism, Equity, and Inclusion Series* is a professional development series designed to further prepare attendees to best serve our diverse college community.
- *Supporting Undocumented Students* is a professional development series designed to further the knowledge of campus faculty staff on the experiences, challenges, and resources for undocumented students in the current political context.

Geography as a discipline is founded in principles that promote equity and inclusiveness in our classrooms and beyond. Students in geography courses are provided with the analytical tools to contextually understand inequality at various scales. This awareness enables them to recognize the various systems of oppression at play in contemporary societies and perhaps evoke change in their immediate communities.

Geography faculty are expected to support the needs of our diverse students by utilizing the various supportive campus resources. Furthermore, our faculty facilitate the access and knowledge of the available supportive services by including this information in the course syllabi and directing students accordingly.

Inclusivity - We support the involvement of all in the decision-making process.

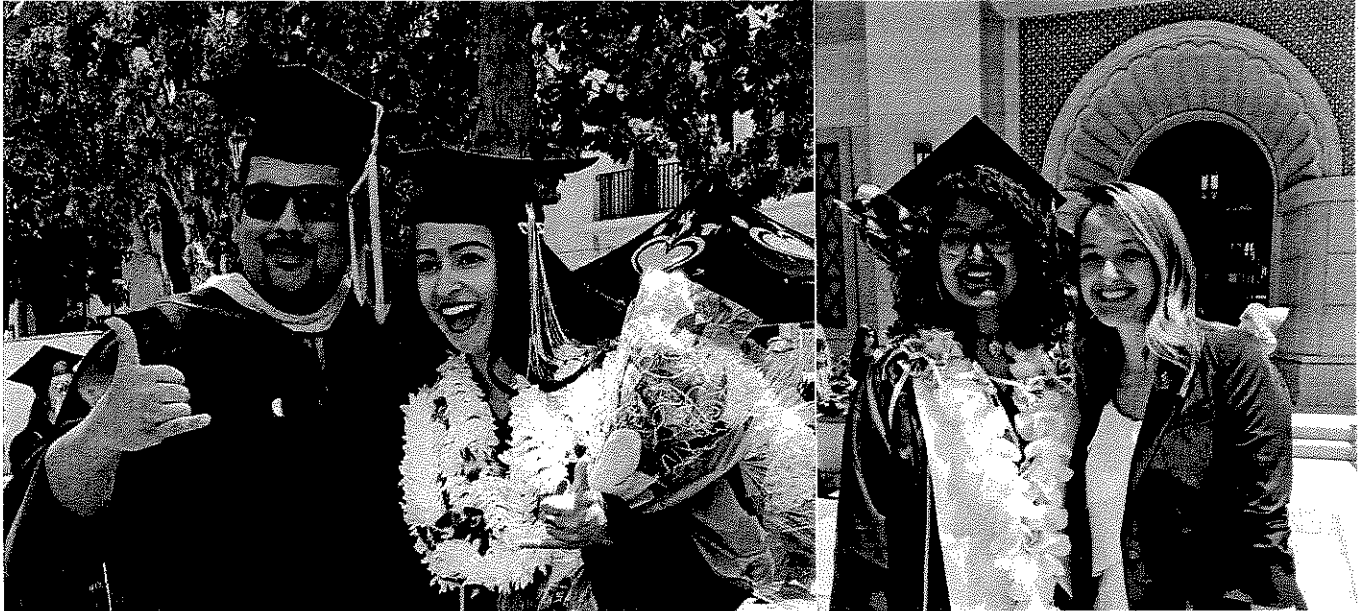
Geography faculty adopt diversified student-centered teaching methods that is inclusive of the diverse students in our classrooms. Furthermore, we support student efforts and organizations that invoke inclusive decision-making to promote student and environmental wellbeing on campus and beyond.

Our faculty continuously seek professional development opportunities in order to become better educators and better resources for our students by attending and participating in lectures, training, and panels that are centered around this goal. Examples of such include:

- *Supporting Undocumented Students – training on the available supportive services and resources available on campus and community for our undocumented students.*

- Behavioral Intervention Team – training on procedures to intervene and assist students facing mental health issues, managing difficult behavior, and accessing supportive services on campus.
- Faculty Panel on the Undocumented Experience – presentation on the undocumented experiences of faculty, policy changes impacting undocumented peoples, and the psychological impacts of the undocumented experience.

Growth - We expect everyone to continue growing and learning.



[Left] Professor Ruben Lopez celebrates Stephanie Calvillo's transfer to University of Hawaii as a geography major. [Right] Professor Aline Gregorio celebrates Julie Vazquez's transfer to UCLA Geography. *Graduation, summer 2017.*

Geography classes emphasize the value of continuous analysis and scrutiny of the status quo in order to achieve demonstrable human progress. Our faculty model this value by staying current in the field and providing lessons that reflect intellectual growth:

- Our faculty attended geography conferences such as American Pacific Coast Geographers Annual Conference 2017 and CSUF All Points of the Compass Annual Conference.
- Our faculty have collaborated in two book clubs analyzing latest works related to the field: "Dream Hoarders", an outlook of America's growing inequality, and "Connectography", an analysis of the increased global networks reshaping power structures throughout the world.
- Ruben Lopez, one of our full-time faculty, is currently pursuing his doctorate in education.
- Our department periodically offers extracurricular learning opportunities to encourage learning beyond the classroom (see pgs. 3-5).
- Our department continues to grow our course offerings, having offered two new courses GEOG 130 (Geography of California) and GEOG 230 (Introduction to Geographic Information Systems) in the last year – both of which provide elective units for transfer and fulfill major requirements.

Furthermore, the geography department advocates for students to continue their education beyond their community college experiences by bringing clarity to the myriad of possibilities in a geography education:

- The Geographer's Forum, Fall 2017: The geography department partnered with Cypress College geography to host a forum for aspiring students seeking professions that make a difference in the world. In this forum, students are exposed to geography professionals that work for

environmental engineering companies, city waste management, community agriculture, education, utility and criminal GIS analytical departments, and city planning.

- Marketing – our faculty have compiled information and resources in a brochure that details the educational and professional prospective in geography, course offerings, and degree requirements. This information will soon be made available in a newly designed department webpage to facilitate access to all students.

Excellence - We honor and build upon our tradition of excellence.

Our department mirrors the excellence of our college by hiring professors of the highest caliber in the field and by continuously elevating our own standards. Our full-time faculty are active members of the college community and challenge our students with relevant and rigorous courses that inspire dedication. Students express their appreciation by frequently recognizing our faculty with nominations for the “Teacher of the Year” award. Examples include Fall 2016 nominations of Professors Ruben Lopez and Aline Gregorio.



Geography Professor Aline Gregorio celebrates Teacher of the Year Award winner, Dr. Mareike Claassen, as one of the selected finalists for the award. Spring 2017.

Innovation - We support innovation in teaching and learning.

Our faculty are adventurous in adopting new teaching methods and technologies. We embrace technology that supports and enhances student learning, such as the use of Canvas as a course management system adopted in the college infrastructure. Geography faculty also utilize new geo-spatial technologies such Google Earth, Esri Story Maps, Web-based GIS, and have recently offered our first Geographic Information Systems (GIS) course – an innovative software that is shaping how we understand and analyze the world as a whole. The geography department is proud to offer a GIS training to our students, a rare opportunity at the community college level.

Integrity – We act in accordance with personal integrity and high ethical standards.

Respect – We support an environment of mutual respect and trust that embraces the individuality of all.

Geography faculty are expected to model high ethical standards and personal integrity to students and expect students to do likewise. Guidelines and expectations are clearly stated on all faculty syllabi. Grading standards are transparent and consistent. Furthermore, geography faculty are expected to communicate in proper and respectful tone to all students, colleagues, and community members.

Geography faculty are expected to abide by principles of academic integrity by presenting lectures that are founded in accuracy and objectivity. Professors are expected to utilize current teaching resources and scientific findings and present well-sourced and relevant lectures and assignments.

College Goals:

Goal 1: Fullerton College will increase student success.

The Geography Department will increase student success by:

- Addressing the needs of underprepared students by providing a working arena for developing transferable skills, such as critical thinking, data analysis, research, and writing in the teaching design.
- Increasing retention and success rates by
 - Identifying and implementing teaching strategies that demonstrate effectiveness.
 - Utilizing tutors and supplemental instruction personnel.
 - Adopting multiple forms of teaching and learning including lecture, videos, discussion, primary research, reading, and online and field learning experiences.
 - Offering courses in multiple formats including online, in-person, laboratories, and hybrid.
- Increasing the numbers of degrees and transfers by
 - Offering a variety of courses that promote personal enrichment and fulfill GE transfer requirements to 4-year institutions and/or fulfill the requirements for the Geography AA and AA-T. For example, ample offerings of GEOG 100 World Regional Geography and GEOG102 Physical Geography enable students to fulfill GE requirements in the Social and Physical Sciences. Periodic offerings of GEOG 120 Global Environmental Problems, GEOG 130 Geography of California, and GEOG 230 Introduction to Geographic Information Systems enable geography majors and interested students to attain specialized knowledge and skills in geography that enable them to further their studies in the field.
 - Exposing students to clear transfer pathways by partnering with local geography professional and programs in student-centered events such as the Geography Forum (see pg.5).
 - Increasing the connection among our majors and faculty through moderating online platforms such as the Fullerton College Geography Facebook Group and faculty blogs/websites.

Goal 2: Fullerton College will reduce the achievement gap. ☑

The Geography department will reduce the achievement gap by:

- Addressing the needs of English learners by
 - Providing a working arena for developing reading and writing skills in the course design.

- Utilizing support services such as the writing and tutoring centers on campus.
- Adopting diversified teaching methods that utilize visuals to reinforce concepts.
- Making lecture and reading materials easily accessible through the course portal.
- Increasing access to *all students* by
 - Utilizing close captioning and accompanying transcripts in all assigned videos.
 - Regularly supporting student needs by coordinating with Disability Support Services.
 - Using graphical presentations to illustrate concepts.
 - Making course materials accessible through the course's online portal.
 - Regularly encouraging students to seek supportive services such as tutoring, supplemental instruction, student health services, EOPS, INCITE, SDSI, Grads to Be, etc.

Goal 3. Fullerton College will strengthen connections with the community. [22]

The department's outstanding campus involvement (examples listed above) strengthens our contacts with alumni, our partnerships with local high schools and universities, and our connections with local businesses and industry. It also increases the funding capabilities of the college and the engagement of the college with the community through events, service, and partnerships.



[Above] World Fest, Spring 2017: Global Geography students join Fashion Revolution and bring awareness to the negative social and environmental impacts of globalized Fast Fashion.

2.0 Program Data & Trends Analysis

2.1 Key Performance Indicators (KPI)

For each KPI listed below, analyze and report your findings and describe what they mean.

(Attach 5-year longitudinal data from Office of Institutional Research and Planning (OIRP) to Appendix.)

KPI	Findings																																																								
Enrollment	<p>Enrollments have been steady over the five-year study interval. From 2013-2017, there was an overall 18% increase. Despite the campus wide 1.3% decline in enrollment in 2017, the geography department has seen a 4% increase in the same year (Figure 1). Course enrollment has remained high and stable in GE courses such as GEOG100 and GEOG102 (Figure 1.2), and steadily increased for in-person and online courses (Figure 1.5). A generally stable enrollment pattern is seen in both Fall and Spring terms, while a remarkable increase is observable in the summer session of 2016 (Figure 1.3), when the department experienced an increase of 105.9% in enrollment. This may be due to the expanded online summer offerings of GEOG 100 and GEOG 102 of the 2016 term. We serve a diversity of students, with our largest enrollment populations being Hispanic/Latinos, Whites, Asians, and African Americans (Figure 1.4).</p> <p>Figure 1: Total enrolment</p> <p>Figure 1.2: 5-year enrolment by course</p> <table border="1"> <thead> <tr> <th>Course</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>Grand Total</th> </tr> </thead> <tbody> <tr> <td>GEOG 100 F</td> <td>666</td> <td>822</td> <td>743</td> <td>734</td> <td>714</td> <td>3,679</td> </tr> <tr> <td>GEOG 102 F</td> <td>576</td> <td>763</td> <td>798</td> <td>734</td> <td>831</td> <td>3,702</td> </tr> <tr> <td>GEOG 102LF</td> <td>137</td> <td>169</td> <td>163</td> <td>176</td> <td>200</td> <td>845</td> </tr> <tr> <td>GEOG 120 F</td> <td>41</td> <td>21</td> <td>90</td> <td>59</td> <td>32</td> <td>243</td> </tr> <tr> <td>GEOG 130 F</td> <td></td> <td></td> <td></td> <td></td> <td>19</td> <td>19</td> </tr> <tr> <td>GEOG 160 F</td> <td>84</td> <td>112</td> <td>27</td> <td>52</td> <td>42</td> <td>317</td> </tr> <tr> <td>Grand Total</td> <td>1,504</td> <td>1,887</td> <td>1,821</td> <td>1,755</td> <td>1,838</td> <td>8,805</td> </tr> </tbody> </table>	Course	2013	2014	2015	2016	2017	Grand Total	GEOG 100 F	666	822	743	734	714	3,679	GEOG 102 F	576	763	798	734	831	3,702	GEOG 102LF	137	169	163	176	200	845	GEOG 120 F	41	21	90	59	32	243	GEOG 130 F					19	19	GEOG 160 F	84	112	27	52	42	317	Grand Total	1,504	1,887	1,821	1,755	1,838	8,805
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Figure 1.3: Enrolment by term

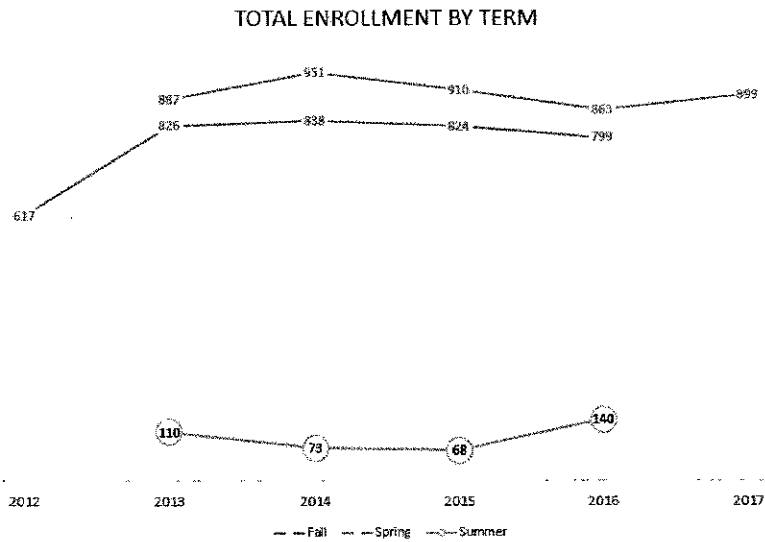


Figure 1.4: Enrolment by ethnicity

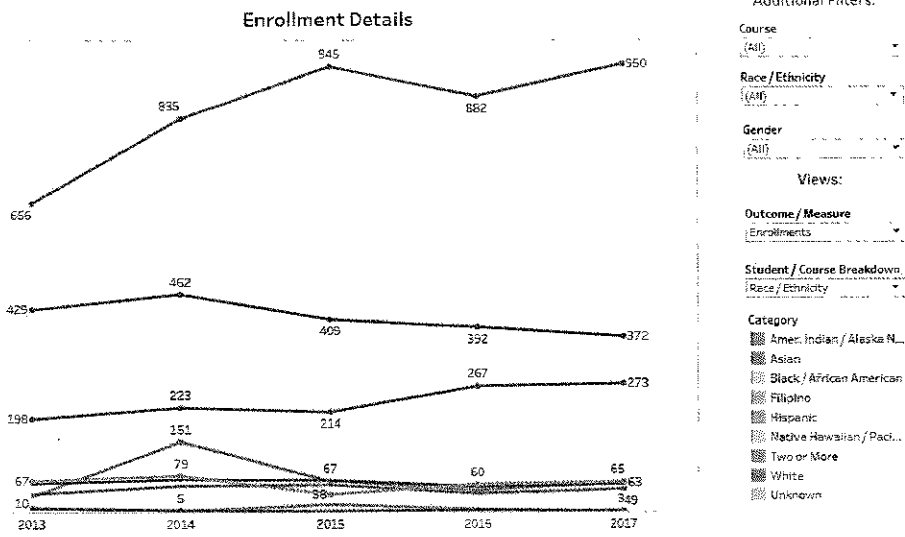
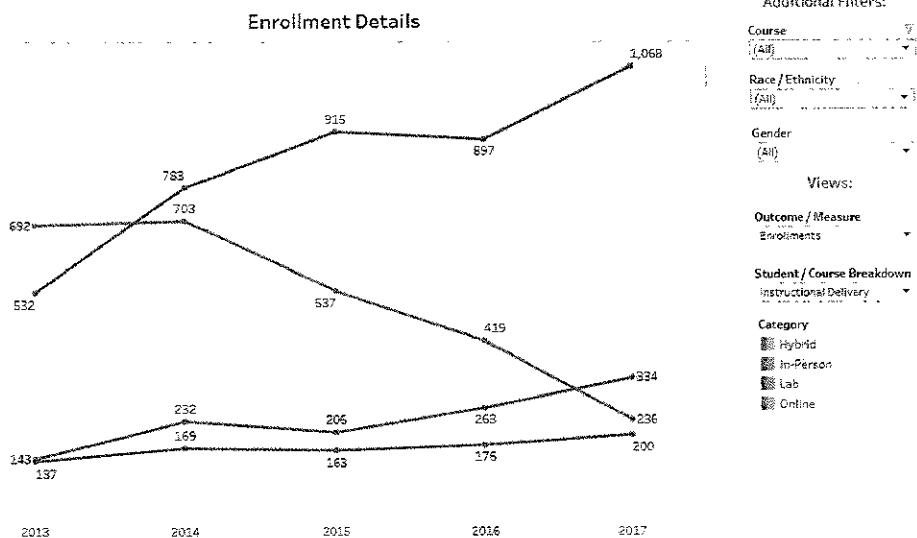


Figure 1.5: Enrolment by method of instruction



Total FTES

FTES has ranged from 140-178 in a 5-year period, with the highest year being 2017. Despite a campus-wide decrease of 2.1% in FTES and 0.2% decrease in the Social Science Division, the geography department has increased the total FTES by 6.7% in the year of 2017 (Figure 2). While the FTES patterns for Spring and Fall terms show modest changes and slight overall increases, Summer 2017 has seen an increase of 131% in FTES (Figures 2.1). This increase reflects the department’s ability to serve more students through overcoming the limitations of access to campus facilities by offering hybrid and online courses.

Figure 2: Total FTES

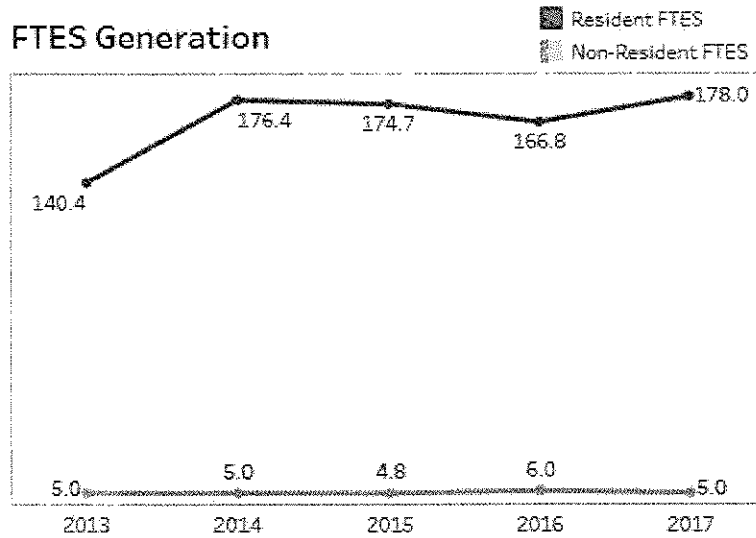
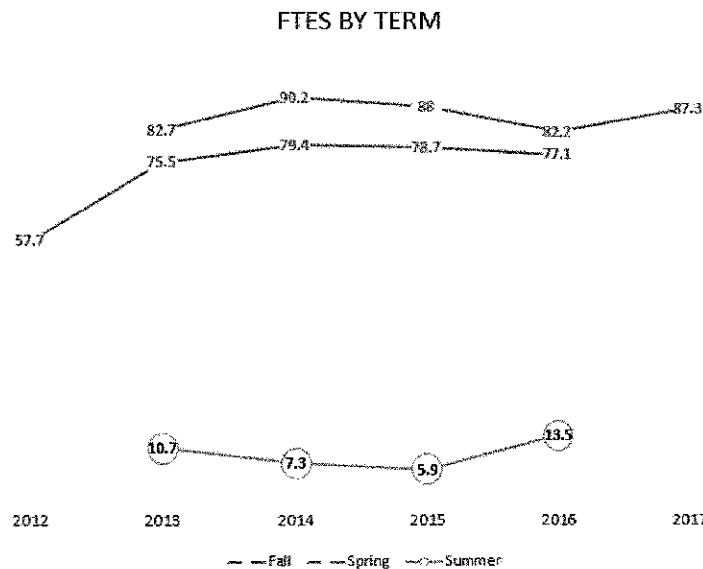


Figure 2.1: FTES by term



Sections

The number of active sections have ranged from 32-49, increasing over the five years and without cancelations except for the year of 2016 (Figure 3). This pattern is aligned with overall patterns for the campus and the Social Sciences Divisions, but exceptional in its lack of cancelations. While the campus saw the greatest cancelations of courses in

2017, the department experienced none. A steady increase in the offerings of sections is notable in all terms, 2017 having the most offerings. Summer offerings increased from 1 in 2013 to 4 in 2017. The department has focused on overcoming facility limitations and serving distance learners through online and hybrid courses. Over the years, online geography course offerings increased from 1 to 5 sections (Figure 3.1). Furthermore, the department has drastically increased its in-person sections from 10 in 2013 to 29 in 2017 (Figure 3.2): the lack of course cancellations indicates that increased course offerings is being met by student interest and vice-versa.

Figure 3: Total sections and cancellations

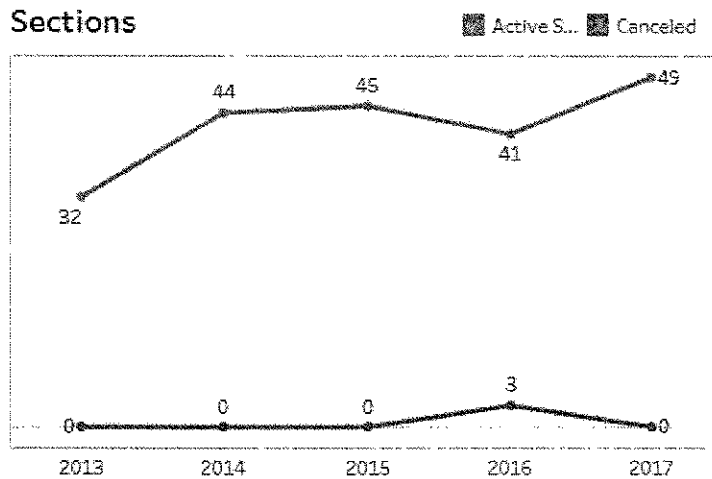


Figure 3.1: Online Sections

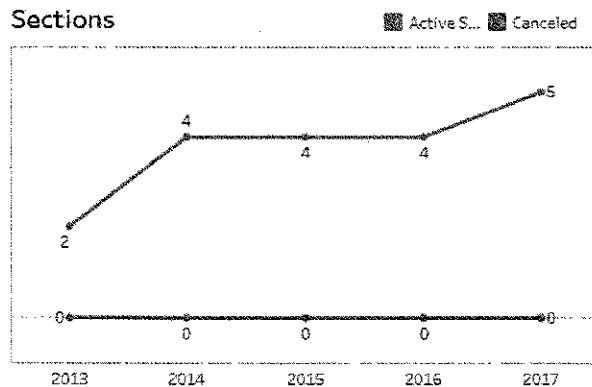
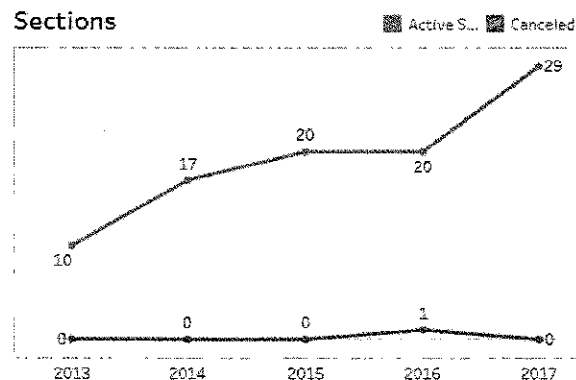


Figure 3.2: In-Person Sections



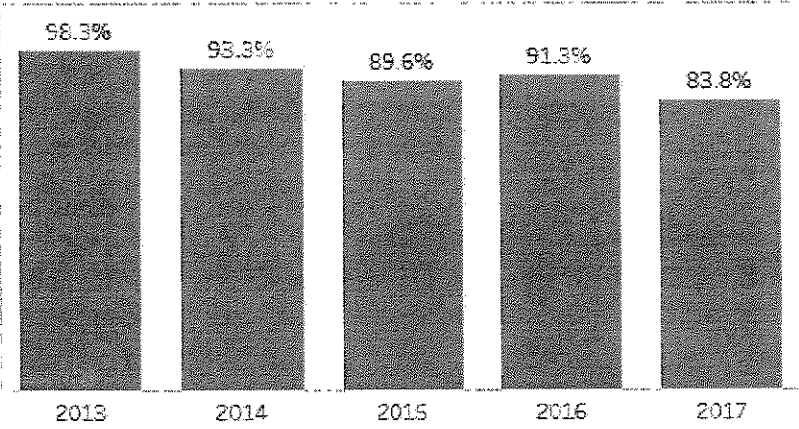
FTEF	FTEF varied from 7.6 to a high of 10.2. Variations in FTEF are largely attributable to growth or reductions in full-time faculty overload, the number of adjuncts, and load bank leaves.																		
Fill Rate	<p>The fill rate for the Geography Department reflects overall patterns of the campus and the Social Science Division. For the geography department, it ranged from 98.4% in 2013 to 83.8% in 2017, remaining a high rate despite the slight decrease (Figure 5). The continually high fill rates of the geography department reinforce previous patterns detected: increased course offerings are being met with increased enrollment and filling of geography course offerings.</p> <p>Figure 5: Census Fill Rates</p> <p>Census Fill Rate</p>  <table border="1" data-bbox="384 590 1182 1020"> <thead> <tr> <th>Year</th> <th>Fill Rate (%)</th> </tr> </thead> <tbody> <tr> <td>2013</td> <td>98.3%</td> </tr> <tr> <td>2014</td> <td>98.3%</td> </tr> <tr> <td>2015</td> <td>89.6%</td> </tr> <tr> <td>2016</td> <td>91.3%</td> </tr> <tr> <td>2017</td> <td>83.8%</td> </tr> </tbody> </table>	Year	Fill Rate (%)	2013	98.3%	2014	98.3%	2015	89.6%	2016	91.3%	2017	83.8%						
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WSCH/FTEF	<p>Over the 5-year period, the WSCH/FTEF has remained stable averaging at 558, a strong number in terms of productivity. The department balances 8 labs, 5 online, 29 in-person classes, and 7 hybrids and our WSCH/FTEF demonstrates that this approach works well to maintain a high productivity, well above the 525 “standard.”</p> <p>Faculty</p> <table border="1" data-bbox="368 1318 1262 1461"> <thead> <tr> <th></th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> </tr> </thead> <tbody> <tr> <td>Total FTEF</td> <td>7.6</td> <td>10.2</td> <td>10.0</td> <td>8.7</td> <td>10.1</td> </tr> <tr> <td>WSCH per FTEF</td> <td>578.0</td> <td>536.2</td> <td>538.5</td> <td>595.6</td> <td>543.3</td> </tr> </tbody> </table>		2013	2014	2015	2016	2017	Total FTEF	7.6	10.2	10.0	8.7	10.1	WSCH per FTEF	578.0	536.2	538.5	595.6	543.3
	2013	2014	2015	2016	2017														
Total FTEF	7.6	10.2	10.0	8.7	10.1														
WSCH per FTEF	578.0	536.2	538.5	595.6	543.3														
Retention	<p>The course retention rates for the geography department exceed the patterns of the college and recently matched that of the Social Science Division, varying from 81-85% and greatly increasing over the recent years (Figure 6). Spring and Fall terms are consistent with the overall patterns, while retention rates of the Summer terms have remained higher than semester terms (Figure 6.1). The higher retention rates in summer is also observed in campus-wide patterns and probably attributable to the preparedness of students who venture into the intensive nature of summer courses. The increased retention rates of students over recent years may relate to the hiring of two new full-time faculty who are engaged in the campus community and in assisting students in office hours.</p>																		

Figure 6: Retention Rates – College, Social Science Division, and Geography

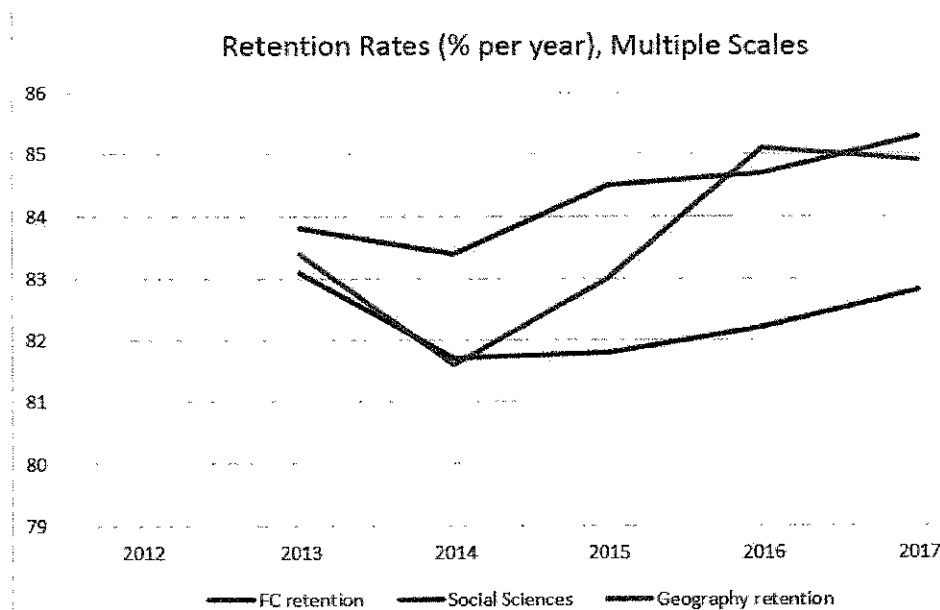
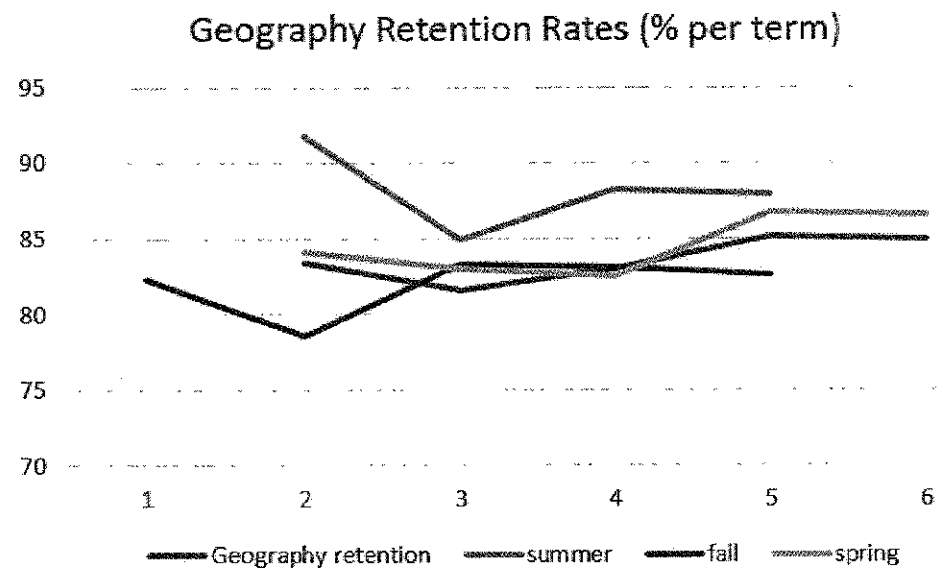


Figure 6.1: Retention Rates by Term



The retention rates by course and method of instruction vary slightly. Most courses are within the 81-85% retention rates of the department, most notably GEOG 100 and GEOG 102, the GE courses with highest student enrollment. Elective/major courses in geography exceed the department's retention patterns: GEOG 160 had retention rates as high as 95.2% (in 2017) and GEOG 120 had retention rates as high as 91% (in 2015). These numbers may reflect the interest of the students who choose to fulfill their elective units with geography courses. It is notable that online classes have the lowest student retention rates (averaging 73%) (Figure 6.2) closely resembling the average online retention rate for the college (77%). The rates of retention among ethnic groups and gender are also within patterns of the college, which remain high with minor but notable variations across race/ethnic groups (Figure 6.3; further analyzed in Sec 2.3).

Figure 6.2: Retention Rates by Delivery Method

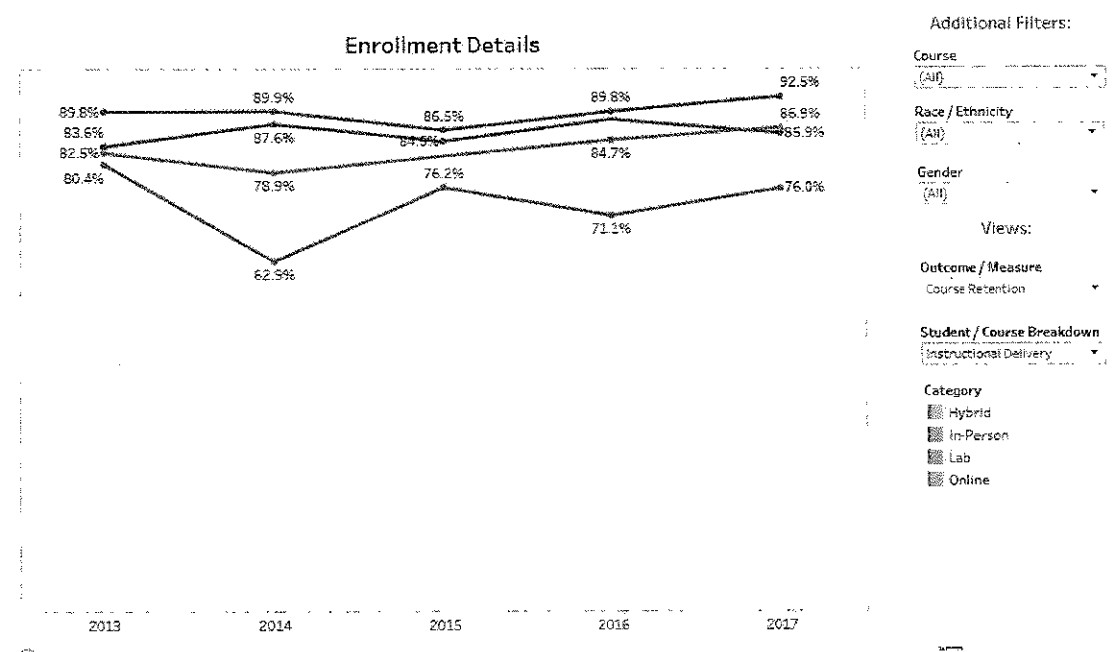
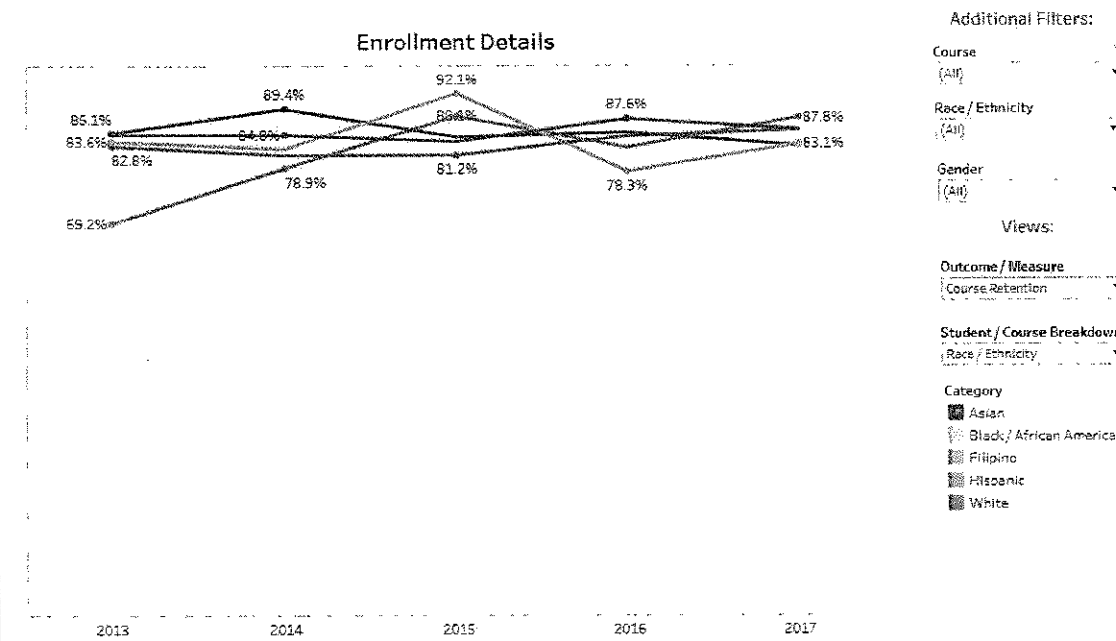


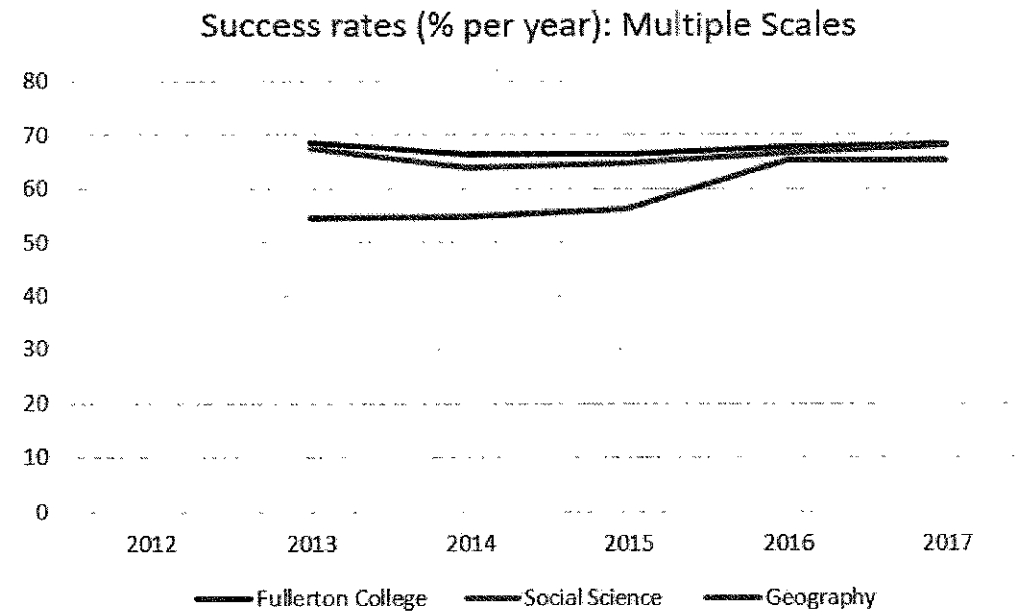
Figure 6.3: Retention Rates by Race/Ethnicity



Success

The recent success rates of the department somewhat mirror patterns of the college (~66 to 68%) and the Social Science Division (~64% to 68%) ranging from 54.5% to 65.2%, notably improving over recent years (Figure 7). While variations exist between the Spring and Fall terms, with Spring success rates being considerably higher (as high as 71% in 2016), an overall increase in success rates is notable in both terms over the recent years. The differences between Fall and Spring may be attributed to the number of new students beginning college in the Fall, many of which may be underprepared. Summer success rates mirror patterns witnessed in retention rates, being notably higher than semester terms (75%-80%) likely because students enrolled in the intensive summer courses are seasoned college students (Figure 7.1).

Figure 7: Success Rates – College, Social Science Division, and Geography



Variability in success rates is most notable when isolating methods of instruction (Figure 7.1) – the high success rates (as high as 88%) of laboratory courses reinforce the value of a sensory learning experience. In-person classes have consistently held higher success rates than online and hybrid courses. Nonetheless, there has been a remarkable improvement in the success rates of the department’s online courses, likely due to recent technological adoptions such as Canvas and a more interactive web-based approach. Hybrid courses lag behind all instructional methods. Lastly, success rates also vary notably across ethnic/racial groups – Latinos/Hispanics and Black/African American students displaying lower rates (Figure 7.3). These results are analyzed in Section 2.3.

Figure 7.1: Success Rates by Term

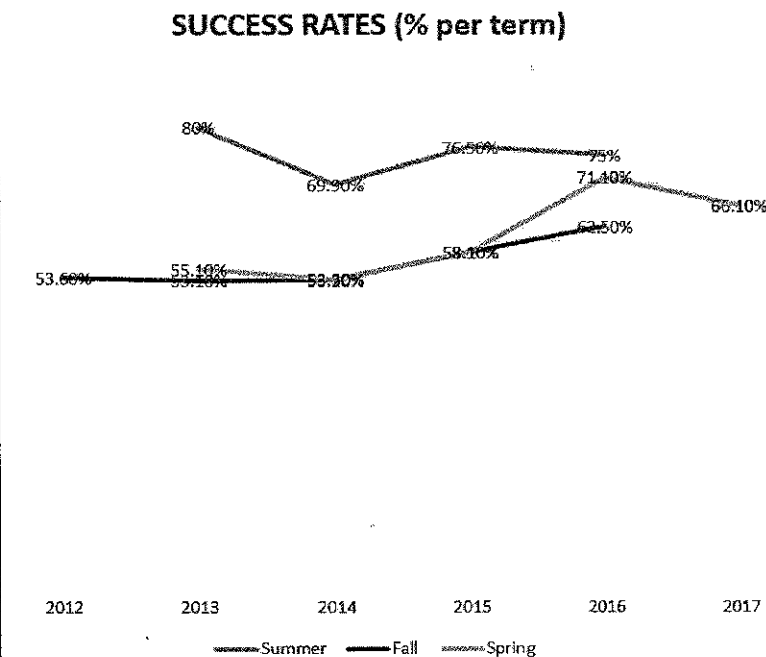


Figure 7.2: Success Rates by Instructional Method

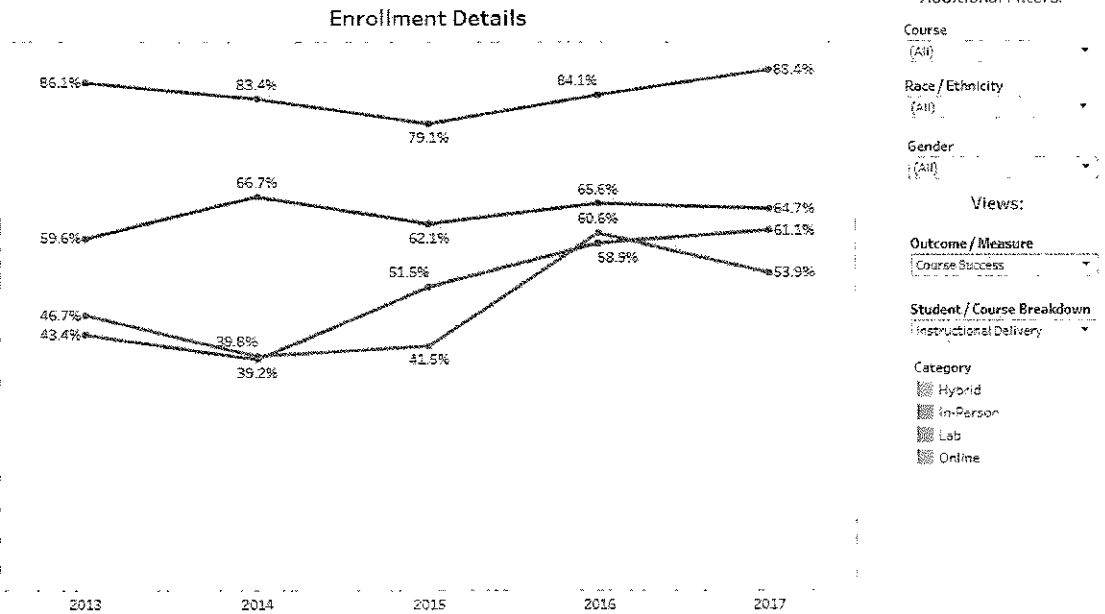
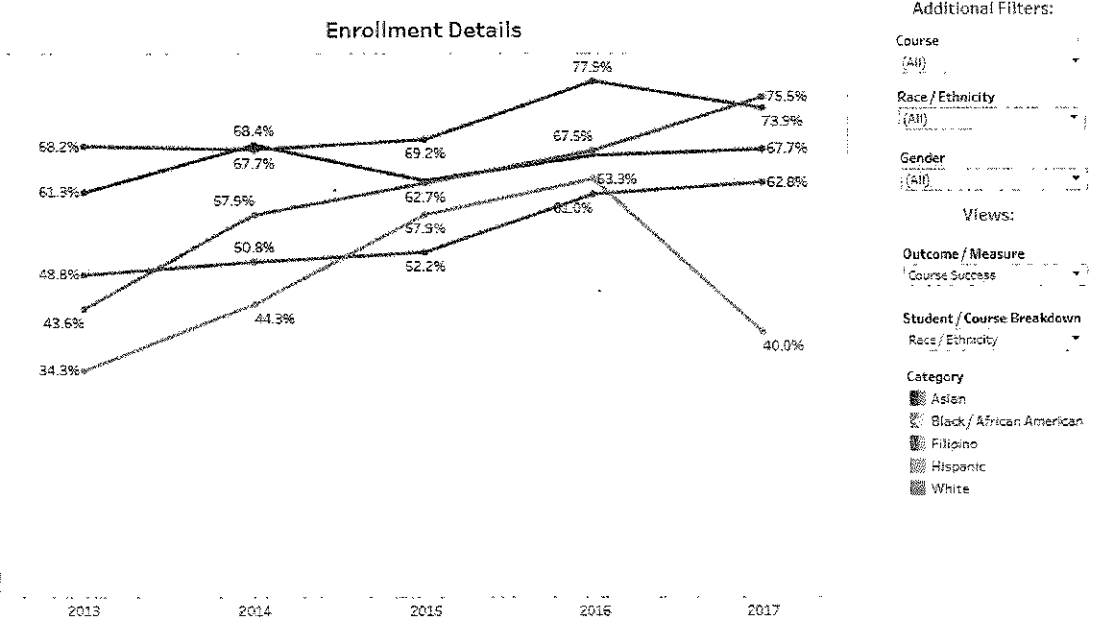
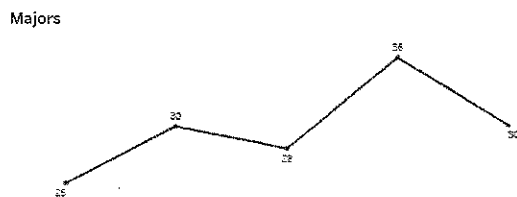


Figure 7.3: Success Rates by Race/Ethnicity



Majors

The number of students majoring in geography ranged from 25-36 and averaged 30 students over the study period. The department introduced the AA-T in 2016, and awarded 11 AA-T Geography Degrees between the period of 2016-2017. It is important to note that the reliability of this data can be questioned given that many students do not officially declare a major while journeying through general education courses.



2.2 Peer Institution Comparison

How does your program compare with peer institutions? Provide a *narrative* of your comparison. (Peer institutions are colleges or programs identified by the Office of Institutional Research and Planning (OIRP)).

FC's Geography Department success and retention rates are comparable to peer institutions (and to the Fullerton College campus-wide patterns) lagging slightly behind in success rates in the 5-years of this study. Some factors may explain these disparities: First, many of the geography departments at the peer institutions listed are in the Natural Science Division (ex: Cerritos College, Pasadena, LA City College) which tend to have far more resources (STEM Grant, for example) to support sensory learning experiences in field trips and fully equipped laboratories (see SAP 1, and Sec. 3.2). Secondly, over the year of 2015, the department had only one full-time faculty member and was substantially strained in servicing students outside of the classroom (given that adjunct faculty do not serve office hours). It is notable that since then, the department's success rate climbed by about 10%. Finally, it is important to acknowledge that a myriad of factors influence student success and retention rates: these figures are not caused solely by the geography department's effectiveness. For example, according to Fullerton College's Institutional Effectiveness Report, a large number of our students are underprepared – this factor alone is a challenge for student success that college and individual departments must overcome (see Sec 2.6). The metric of student success and retention depends on the preparedness of students. Until faculty have access to data that reveals the college readiness profiles of students enrolled in our courses, we cannot fully gauge the forces behind student success and retention. Furthermore, these departments from "peer institutions" are not comparable to our department: they offer substantially different programs and courses while serving different populations across socio-economic and ethnic groups. We have not detected a program that provides a methodologically sound comparison to our program. It is important to recognize that these methodological discrepancies compromise our ability to compare the effectiveness of our program.

Figure 9.1: Success and Retention Rates across Peer Institutions

Peer Institutions	2013		2014		2015		2016		2017	
	Retention rates	Success rates	Retention Rate	Success Rates	Retention Rate	Success Rate	Retention Rate	Success Rate	Retention Rate	Success Rate
Cerritos Total	87.97 %	66.07 %	87.73 %	65.42 %	88.15 %	67.42 %	87.54 %	71.92 %	87.54 %	71.92 %
Cypress Total	91.39 %	76.51 %	87.04 %	75.20 %	89.32 %	80.87 %	90.44 %	79.30 %	90.44 %	79.30 %
LA City Total	89.61 %	72.97 %	88.73 %	68.23 %	89.69 %	71.94 %	91.14 %	70.65 %	91.14 %	70.65 %
Pasadena Total	84.03 %	71.07 %	74.97 %	64.43 %	80.25 %	69.79 %	81.02 %	68.95 %	81.02 %	68.95 %
Santa Ana Total	79.73 %	64.60 %	73.43 %	61.18 %	85.93 %	74.43 %	85.20 %	71.93 %	85.20 %	71.93 %
Fullerton College	83.40 %	54.50 %	81.60 %	54.80 %	83 %	56.30 %	85.10 %	65.20 %	84.90 %	65.20 %

Figure 9.2: Degrees/Certificates and Transfers

PROGRAM AWARDS	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Cerritos Total	5	3	4	10	14
Associate in Arts for Transfer (A.A.-T) Degree				10	14
Associate of Arts (A.A.) degree	5	3	4		
Cypress Total		3	2	9	5
Associate in Arts for Transfer (A.A.-T) Degree		2	1	2	4
Associate of Arts (A.A.) degree		1			
Certificate requiring 30 to < 60 semester units			1	7	1
LA City	NA	NA	NA	NA	NA
Pasadena	NA	NA	NA	NA	NA
Fullerton Total	3	3	2	5	5
Associate in Arts for Transfer (A.A.-T) Degree				2	2
Associate of Arts (A.A.) degree	3	3	2	3	3
Santa Ana Total	2	3	2	2	1
Associate in Arts for Transfer (A.A.-T) Degree				1	
Associate of Arts (A.A.) degree	2	3	1	1	1
Certificate requiring 30 to < 60 semester units			1		

2.3 Achievement Gap

Indicate achievement gap for each of the groups listed below. (Attach to Appendix the Success and Retention by Ethnicity Data as identified by the Office of Institutional Research and Planning.)

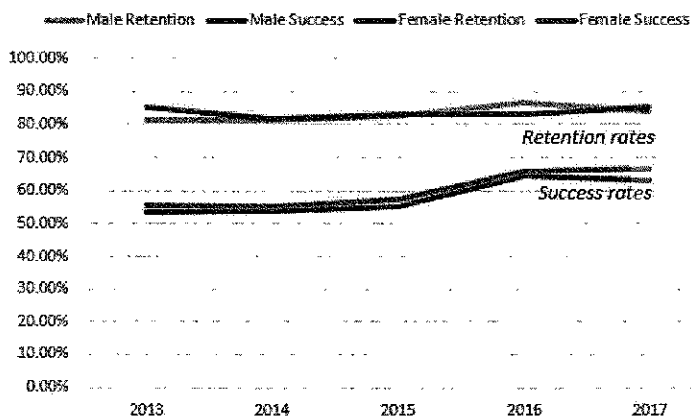
Retention & Success rates by gender

With respect to gender, it is clear from the retention and success data that the male and female student populations are performing equally well. Improvements in success rates is notable for both groups (Figure 10.1).

Figure 10.1 Retention & Success Rates by Gender

	Male Retention	Male Success	Female Retention	Female Success
2013	81.40%	53.30%	85.40%	55.90%
2014	81.50%	54.10%	81.80%	55.20%
2015	82.50%	55.30%	83.30%	57.60%
2016	86.70%	64.50%	83.30%	66%
2017	83.90%	63.20%	85.50%	66.80%

Success and Retention Rates (%) by Gender

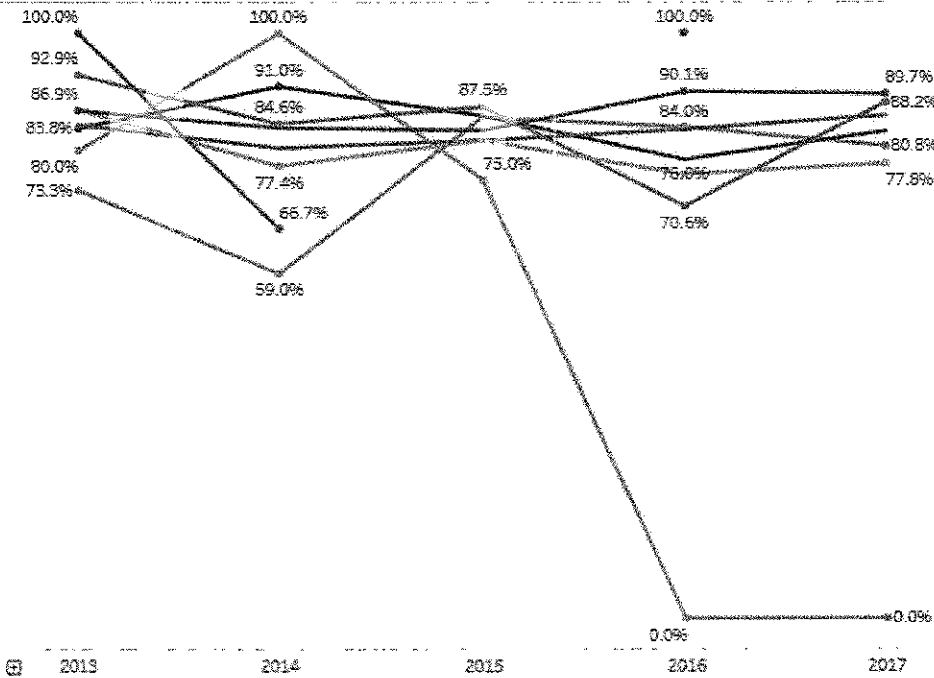


Retention & Success rates by Race/Ethnicity

The success and retention rates are generally positive across ethnic/racial groups, with exception to extreme fluctuations associated with ethnicities that have relatively small student populations (Figure 10.2 and 10.3). When it comes to success rates, there is a notable insufficiency in the average success rate of African Americans (44%) and Hispanics (55%). This pattern mirrors the campus-wide success rates of African Americans (43%) and Hispanics (55%), suggesting that the shortcoming in supporting our Hispanic and, specifically, our African American students requires immediate attention at a broader scale. Furthermore, the volatility of success rates of African Americans is particularly notable in the study period, ranging from 22%-72%. This may have to do also with the wide fluctuations in enrolment of African Americans in geography courses and the comparatively small number of African American students: with the exception of 2014, the numerical enrolment of African Americans in geography are below statistical significance.

Figure 10.2: Course Retention by Race/Ethnicity

Retention Rates by Race/Ethnicity	Year					Range		average
	2013	2014	2015	2016	2017	MAX	MIN	
Asian-American	86.90%	83.90%	83.50%	90.10%	89.70%	90.10%	83.50%	86.81%
African-American	87%	77.40%	81.80%	76%	77.80%	87%	76%	80%
Filipino	92.90%	84.60%	87.50%	70.60%	88.20%	92.90%	70.60%	83.90%
Hispanic	84.40%	80.50%	81.80%	83.60%	86%	86.00%	80.50%	83.26%
Native American	100%	66.70%	NA	100%	NA	100%	67%	87%
Other Non-White	NA	NA	NA	NA	NA	NA	NA	NA
Pacific Islander	80%	100%	75%	0.00%	0.00%	100%	0%	51%
White	83.80%	91%	86%	78.50%	83.30%	91.00%	78.50%	84.59%
Unknown	73.30%	59%	85.70%	84%	80.80%	85.70%	59.00%	75.36%
Range (MAX)	100.00%	100.00%	87.50%	100.00%	89.70%			
Range (MIN)	73.30%	59.00%	75.00%	0.00%	0.00%			
Average	86.16%	80.21%	82.64%	68.28%	66.17%			



(All)

Race / Ethnicity

(All)

Gender

Female

Views:

Outcome / Measure

Course Retention

Student / Course Breakdown

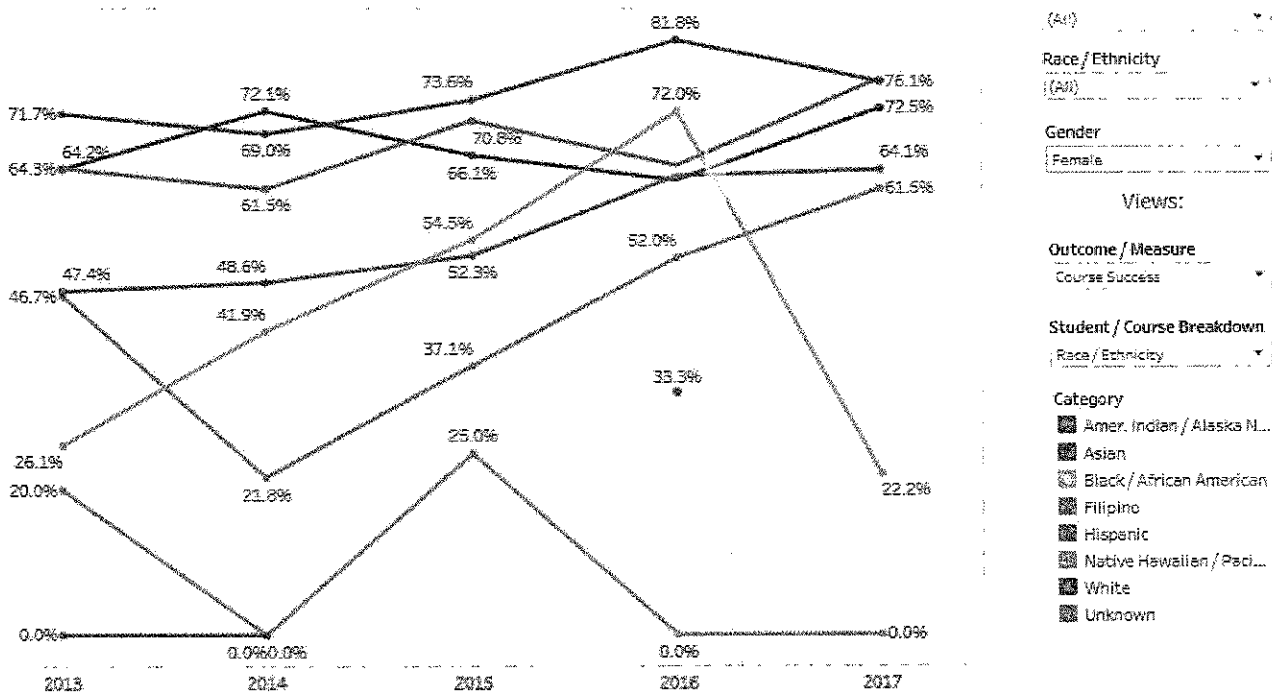
Race / Ethnicity

Category

- Amer. Indian / Alaska N...
- Asian
- Black / African American
- Filipino
- Hispanic
- Native Hawaiian / Paci...
- White
- Unknown

Figure 10.3: Course Success by Race/Ethnicity

Success Rates by Race/Ethnicity	Year					Range		average
	2013	2014	2015	2016	2017	MAX	MIN	
Asian-American	71.70%	69.00%	73.60%	81.80%	76.10%	81.80%	69.00%	74.71%
African-American	26%	41.90%	54.50%	72%	22.20%	72%	22%	44%
Filipino	64.30%	61.50%	70.80%	64.70%	76.50%	76.50%	61.50%	67.97%
Hispanic	47.40%	48.60%	52.30%	63.30%	64%	64.10%	47.40%	55.31%
Native American	0%	0.00%	NA	33%	NA	33%	0%	13%
Other Non-White	NA	NA	NA	NA	NA	NA	NA	NA
Pacific Islander	20%	0%	25%	0.00%	0.00%	25%	0%	10%
White	64.20%	72%	66%	62.70%	72.50%	72.50%	62.70%	67.54%
Unknown	46.70%	22%	37.10%	52%	61.50%	61.50%	21.80%	43.20%
Range (MAX)	71.70%	72.10%	73.60%	81.80%	76.50%			
Range (MIN)	0.00%	0.00%	25.00%	0.00%	0.00%			
Average	41.21%	38.70%	53.11%	51.16%	49.93%			



2.4 Program Effectiveness

Since your previous Program Review Self-Study, what significant changes have occurred that impact the effectiveness of your program?

This study cycle captures transitory times in the Geography Department. In 2015, Professor Claudia Lowe passed away, and the other full-time faculty, Susie Grabiell, who had been premeditating her own retirement, was alone managing the department. This impacted our ability to sustain course offerings and serve students beyond the classroom. Additionally, during this same period of time, the department had adopted a large number of hybrid courses (Sec 2.1, Figure 1.5) to overcome classroom availability limitations. These factors created a period of instability for the department, as students had less access and face-to-face interaction with full-time faculty. These factors are reflected in the success rates by mode of instruction and by period of time (Sec 2.1, Figure 7.2). The year of 2016 marks a notable change in the success rates of our students. A combination of more in-person courses and the hiring of two new faculty are likely factors for this change. While the department will continue to capitalize on hybrid and online modes of instruction to increase student access to geography classes, this shift cannot come at the cost of student access to faculty office hours and face-to-face interaction. We seek to strike a balance between digital modes of instruction while still providing the in-person support for our students.

While this study cycle does not capture this change, the use of Canvas as a classroom management system seems to have positively impacted student performance in distance and in-person modes of instruction. In the summer of 2017, GEOG 100 online yielded positive results (77% success rate) and positive student feedback (Figure 10.4). In the past, online courses had primarily capitalized on textbook online platforms. For the first time this summer, our department offered a fully customized web-based learning that did not require textbook access codes and depended entirely on educational resources of open access (magazines, newspaper articles), module content pages authored by the instructor, and instructor lecture videos. While the integration of Canvas in all of our courses is a recent phenomenon, there is great optimism coming from faculty and students in its adoption.