

DATE: 6/30/21

TO: Fatima Jinnah, Natalie Latteri, Guided Pathways Program Mapping Leadership Team

FROM: Doreen Finkelstein, Research Analyst

RE: Guided Pathways Program Maps Spring 2021 Survey

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### **Introduction:**

Guided Pathways Program Maps are a resource for students to provide them with clear and helpful information on degree and certificate programs. In Spring 2021, an email was sent to new students enrolled at Foothill College (first-time new or first-time transfer) to invite them to assist the development of Guided Pathways Program Maps by completing a survey. The survey presented three sets of excerpts from program maps — program overview information, program coursework, and program career information — and asked questions on whether the information was clear, and whether students correctly understood the information presented. The three sets of excerpts came from program maps currently in development for Mathematics, Spanish, and Chemistry. The survey concluded by asking about factors that are important when choosing a major and degree program.

The survey questions and responses are given in the appendix of this report.

### **Results Overview:**

- The response rate to the survey was low, at 3% (67 students out of 2,020). Students who responded to the survey were more likely to be Asian or Filipino, less likely to be African-American or Latinx, and more likely to be female. Survey findings should be interpreted with these differences in mind, and caution should be taken when attempting to generalize the results to all first-time new and first-time transfer students at Foothill College.
- Most survey respondents (75%) had previously enrolled at another college prior to attending Foothill. A little over one-third of survey respondents (36%) said they intend to complete a degree or certificate at Foothill, while 17% were unsure. Half of respondents (52%) intend to transfer to a 4-year college or university. The majority of respondents (83%) know what they want to study at Foothill, and believe they can complete their educational goal within 1-2 years (78%).
- Respondents generally understood the information presented in the program map excerpts. Program map information that respondents rated as most clear, or agreed that they

understood, dealt with length of time for the pathway (91%), units for the pathway (91%), units in a given term (97%), and courses needed in a given term (93%-96% by term and type of course). Program map information that respondents rated as least understood was terminology such as "IGETC-CSU General Education" (66% agreed they knew the meaning of this term) and "IGETC Area 5C" (51% agreed they knew the meaning of this term).

- Some aspects of the program maps were less well understood, and led respondents to endorse incorrect statements about them. Half of respondents (48%) agreed that a degree would only be accepted by the two specific schools listed as transfer destinations, 62% agreed that the program map only applies to the years 2020-21 (which was the catalog year), and 63% agreed that "2-year" referred to the plan being intended for community college students instead of being the length of the plan.
- Respondents had difficulty applying one piece of program map information to four scenarios for satisfying a general education requirement. Of the four scenarios presented, the majority of respondents answered correctly for two scenarios (66% and 74%), while less than half of respondents answered correctly for the other two scenarios (45% and 38%).
- The three factors most frequently rated as very important when choosing a major and degree program were the education level needed for the desired salary (80%), how much time it would take to finish (77%), and potential job growth in the field (77%). The factor least frequently rated as very important was national earnings (45%); respondents viewed state (67%) and local earnings (72%) as more important.

## **Results Detail:**

### ***Response rate and respondent demographics***

The survey invitation was emailed to students who were enrolled in Spring 2021 and were new to Foothill College (first-time new or first-time transfer). Students were given the opportunity to enter a raffle to win one of five \$30 gift cards in return for completing the survey. A total of 2,020 students received the survey invitation; 67 students completed the survey, for a response rate of 3%.

Table 1 shows the ethnicity of survey respondents compared to the ethnicity of students who received the survey invitation. Students who responded to the survey were less likely to be African-American (1% vs. 5%) or Latinx (13% vs. 21%), and more likely to be Asian (43% vs. 32%) or Filipinx (7% vs. 5%).

Table 2 shows the gender of survey respondents compared to the gender of students who received the survey invitation. Students who responded to the survey were more likely to be female (63% vs. 53%) and less likely to be male (31% vs. 43%).

**Table 1: Ethnicity of Survey Invitations vs. Survey Respondents**

	Survey Invitations		Survey Respondents	
	Count	Percent	Count	Percent
African American	100	5%	1	1%
Asian	656	32%	29	43%
Filipinx	111	5%	5	7%
Latinx	415	21%	9	13%
Native American	10	0%	0	0%
Pacific Islander	21	1%	0	0%
White / Middle Eastern	612	30%	20	30%
Decline to State / Other	95	5%	3	4%
Total	2020	100%	67	100%

**Table 2: Gender of Survey Invitations vs. Survey Respondents**

	Survey Invitations		Survey Respondents	
	Count	Percent	Count	Percent
Female	1075	53%	42	63%
Male	877	43%	21	31%
Non-binary	1	0%	1	1%
Decline to State	67	3%	3	4%
Total	2020	100%	67	100%

Because of the low response rate and these differences between survey respondents and those who were invited to take the survey, survey findings should be interpreted with caution. While the findings hold true for survey respondents, they may not be generalizable to other first-time new and first-time transfer students at Foothill College.

The majority of survey respondents said they had previously enrolled in another college prior to attending Foothill (75%). Around one-third (36%) said they intend to earn a degree or certificate at Foothill, while 17% were unsure. Half of survey respondents (52%) said they intend to transfer from Foothill to a 4-year college or university (regardless of whether they intend to earn a degree or certificate) while 12% were unsure. A large majority (83%) said they know what they want to study or major in while at Foothill. Most students (78%) said they expect to reach their educational goal at Foothill within 1-2 years.

***Program Overview Information***

The survey first presented a program map excerpt with program overview information for the Associate of Science degree for Transfer (AS-T) in Mathematics (see appendix for the excerpt).

Survey respondents were asked whether specific pieces of information in this excerpt were clear, not clear, or if they didn't see the information. Respondents were also asked whether they agreed

or disagreed with a series of statements about the excerpt in order to gauge their understanding of the information presented. Results are summarized in Table 3.

**Table 3: Clarity of Program Overview Information**

	Clear or Understood		Not Clear, Not Seen, or Misunderstood / Unsure	
	Count	Percent	Count	Percent
Beginning year of the pathway	41	61%	26	39%
Length of time for the pathway	61	91%	6	9%
Major	59	88%	8	12%
Relevant areas of interest	43	65%	23	35%
Transfer destinations	63	94%	4	6%
Type of certificate/degree that can be earned	59	88%	8	12%
Type of general education (GE) pathway	55	82%	12	18%
Units for the pathway	60	91%	6	9%
“IGETC-CSU General Education”	44	66%	23	34%
Meaning of listing two specific schools as transfer destinations	15	22%	52	78%
Meaning of “catalog year”	9	14%	56	86%
Meaning of “2-year”	8	12%	59	88%
90.5 units to graduate	54	81%	13	19%

The most clear pieces of information were the length of time for the pathway (91% rated this as clear), the major (88% clear), the type of degree or certificate that can be earned (88% clear), the type of general education pathway (82% clear), and the units for the pathway (91% clear). Less clear pieces of information were the beginning year of the pathway (61% clear) and relevant areas of interest (65% clear). The majority of respondents rated transfer destinations for the pathway as clear (94%), but when later asked if they would endorse the incorrect statement “the program map says there are only two schools that will accept this degree for students who wish to transfer,” 48% agreed while 30% were unsure.

Respondents understood that the program map said it would take 90.5 units to graduate with an AS-T degree in Mathematics (81% rated this as agree). The meaning of “IGETC-CSU General Education” was less clear, with 25% saying they did not know what this meant, while 9% said they were unsure of its meaning. While the catalog year is given for reference purposes, 86% of respondents agreed it meant that the program map only applies to the years 2020-2021 or were unsure, and 88% thought that “2-year” meant the pathway is for community college students rather than referring to the length of time to complete the pathway, or else were unsure of its meaning.

**Program Coursework Information**

The survey next presented two program map excerpts for Spanish with program coursework information over two non-consecutive terms, Winter 2021 and Spring 2022 (see appendix for the excerpts).

Survey respondents were asked whether specific pieces of information in these excerpts were clear, not clear, or if they didn't see the information. Respondents were also asked whether they agreed or disagreed with a series of statements about the excerpts in order to gauge their understanding of the information presented. Results are summarized in Table 4.

The majority of respondents (93-97%) rated the courses and units needed in these two terms to be clear. Respondents also understood the difference between "GE" and "Major" (96% agreed) and the meaning of "GE Area" (88% agreed). The term "IGETC Area 5A" was less clear, with 51% saying they knew what this meant.

**Table 4: Clarity of Program Coursework Information**

	Clear or Understood		Not Clear, Not Seen, or Misunderstood / Unsure	
	Count	Percent	Count	Percent
General Education (GE) courses needed in Winter 2021	64	96%	3	4%
Major courses needed in Winter 2021	63	94%	4	6%
Unit counts for Winter 2021	65	97%	2	3%
General Education (GE) courses needed in Spring 2022	62	93%	5	7%
Major courses needed in Spring 2022	63	94%	4	6%
Unit counts for Spring 2022	64	97%	2	3%
Difference between "GE" and "Major"	64	96%	3	4%
"GE Area"	59	88%	8	12%
"IGETC Area 5A"	34	51%	33	49%

The last question in this section of the survey presented respondents with four scenarios and asked them which would satisfy GE Areas 5A, 5B, and 5C according to the program map excerpts. GE Areas 5A, 5B, and 5C require students to take a physical science course, a biological science course, and a laboratory course in either physical science or biological science. Table 5 shows whether respondents were able to correctly apply the program map information for each scenario.

Respondents had difficulty applying the information to the four scenarios in the survey. While most respondents were able to correctly interpret the program map information for the first two scenarios (66% and 74%), less than half answered the last two scenarios correctly (45% and 38%).

**Table 5: Applying Program Map Information on Satisfying GE Areas 5A, 5B, and 5C**

	Correct Response	Answered Correctly		Answered Incorrectly or Unsure	
		Count	Percent	Count	Percent
Winter 2021: Physical Science alone (no lab) AND Spring 2022: Biological Science alone (no lab)	Would NOT satisfy	44	66%	23	34%
Winter 2021: Physical Science + Physical Science lab AND Spring 2022: Biological Science alone (no lab)	Would SATISFY	49	74%	17	26%
Winter 2021: Physical Science alone (no lab) AND Spring 2022: Biological Science + Biological Science lab	Would SATISFY	29	45%	36	55%
Physical Science alone (no lab) AND Spring 2022: Biological Science + Physical Science lab	Would SATISFY	25	38%	41	62%

***Career Information***

The next section of the survey presented a program map excerpt for Chemistry with career information (see appendix for the excerpt).

Survey respondents were asked whether specific pieces of information in this excerpt were clear, not clear, or if they didn't see the information. Results are summarized in Table 6.

Most of the career information in the excerpt was rated as "clear" by a large majority of respondents (88%-94%). The one piece of information that was less clear to respondents was projected job growth in this area for the local region, which was clear to 64% of respondents.

***Factors Influencing Choice of Major and Degree Program***

Finally, survey respondents were given a set of factors and asked to rate whether they were very important, slightly important, or not important when choosing a major and degree program. Results are summarized in Table 7.

The factors rated as most important by respondents were education level needed for the desired salary (80% rated "very important"), how much time it will take to finish (77% rated "very important"), and potential job growth in the field (77% rated "very important"). Most of the other factors asked about were also rated "very important" by more than half of respondents (61%-73%), including state and local earnings (67% and 72%). The one exception was national earnings, with a little under half of respondents (45%) rating them as "very important," and 14% saying they were "not important."

**Table 6: Clarity of Career Information**

	Clear		Not Clear or Not Seen	
	Count	Percent	Count	Percent
Careers associated with the major	62	94%	4	6%
Skill set associated with the major	58	88%	8	12%
Projected job growth in this area for the local region	42	64%	24	36%
Projected national job growth in this area	61	92%	5	8%
The type of degree required for the careers listed	58	88%	8	12%
How much money a student who graduates with an Associate's Degree in this major can expect to earn	62	94%	4	6%

**Table 7: Importance When Choosing a Major and Degree Program**

	Very Important	Slightly Important	Not Important
Whether I think I will enjoy the required courses.	73%	26%	2%
How difficult the courses look to me.	61%	36%	3%
How much time it will take to finish.	77%	17%	6%
Education level needed for the salary I'd like.	80%	20%	0%
Potential job growth in the field.	77%	18%	5%
Skills developed by majoring in the field.	69%	28%	3%
Salary information: National earnings.	45%	41%	14%
Salary information: State earnings.	67%	26%	8%
Salary information: Local region earnings.	72%	23%	5%

**Methodology:**

The survey was created using Remark survey software and administered online between June 2, 2021 and June 16, 2021. Students who were (a) registered in at least one for-credit course in Spring 2021, aside from Apprenticeship and LINC courses; (b) not previously enrolled in a for-credit course at Foothill College, aside from Apprenticeship and LINC courses; and (c) not currently a dual enrollment student were invited to participate in the survey. Students were offered a chance to win a \$30 gift card in return for completing the survey.

**APPENDIX**  
**Guided Pathways Program Map Survey Responses by Question**

**Q1: Please answer the following:**

**Q1a: Have you enrolled at another college prior to this term?**

	Count	Percent	Valid Percent
No	17	25%	25%
Yes	50	75%	75%
Did not respond	0	0%	
Total	67	100%	

**Q1b: Is your goal to earn a degree or certificate at Foothill?**

	Count	Percent	Valid Percent
No	31	46%	47%
Yes	24	36%	36%
Unsure	11	16%	17%
Did not respond	1	1%	
Total	67	100%	

**Q1c: Do you intend to transfer from Foothill to a 4-year college/university (regardless of whether you complete a degree/certificate)?**

	Count	Percent	Valid Percent
No	24	36%	36%
Yes	34	51%	52%
Unsure	8	12%	12%
Did not respond	1	1%	
Total	67	100%	

**Q1d: Do you know what you want to study or major in while at enrolled at Foothill?**

	Count	Percent	Valid Percent
No	6	9%	9%
Yes	55	82%	83%
Unsure	5	7%	8%
Did not respond	1	1%	
Total	67	100%	

**Q2: How long do you think it will take to reach your educational goal at Foothill (regardless whether you plan to enroll full-time or part-time)? An estimate is fine.**

	Count	Percent	Valid Percent
Within 1 year	26	39%	39%
Within 2 years	26	39%	39%
Within 3 years	9	13%	13%
Within 4 years	2	3%	3%
Unsure	4	6%	6%
Did not respond	0	0%	
Total	67	100%	

For questions 3 and 4, here is an excerpt from a program map that contains information about one of Foothill College's programs:

<b>AA/AS DEGREE</b>	<b>AS-T Mathematics (Calculus pathway)</b>		
<b>AREA OF INTEREST</b>	N/A	<b>CATALOG</b>	2020-2021
<b>TRANSFER SCHOOL</b>	San Jose State University and UC Berkeley	<b>TOTAL UNITS</b>	90.5
<b>GE PATTERN</b>	IGETC - CSU General Education	<b>PLAN</b>	2-year

**Q3: Please indicate whether or not each of the following pieces of information is clear to you in the above program map excerpt.**

**Q3a: Beginning year of the pathway**

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	41	61%	61%
Information is NOT clear	15	22%	22%
I don't see this information	11	16%	16%
Did not respond	0	0%	
Total	67	100%	

**Q3b: Length of time for the pathway**

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	61	91%	91%
Information is NOT clear	5	7%	7%
I don't see this information	1	1%	1%
Did not respond	0	0%	
Total	67	100%	

**Q3c: Major**

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	59	88%	88%
Information is NOT clear	8	12%	12%
I don't see this information	0	0%	0%
Did not respond	0	0%	
Total	67	100%	

**Q3d: Relevant areas of interest**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	43	64%	65%
Information is NOT clear	13	19%	20%
I don't see this information	10	15%	15%
Did not respond	1	1%	
Total	67	100%	

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**Q3e: Transfer destinations**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	63	94%	94%
Information is NOT clear	2	3%	3%
I don't see this information	2	3%	3%
Did not respond	0	0%	
Total	67	100%	

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**Q3f: Type of certificate/degree that can be earned**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	59	88%	88%
Information is NOT clear	7	10%	10%
I don't see this information	1	1%	1%
Did not respond	0	0%	
Total	67	100%	

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**Q3g: Type of general education (GE) pathway**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	55	82%	82%
Information is NOT clear	8	12%	12%
I don't see this information	4	6%	6%
Did not respond	0	0%	
Total	67	100%	

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**Q3h: Units for the pathway**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	60	90%	91%
Information is NOT clear	3	4%	5%
I don't see this information	3	4%	5%
Did not respond	1	1%	
Total	67	100%	

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**Q4: For each of the following statements about the above program map excerpt, rate whether you agree, disagree, or are not sure.**

**Q4a: I know what "IGETC-CSU General Education" means.**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Agree	44	66%	66%
Disagree	17	25%	25%
Not sure	6	9%	9%
Did not respond	0	0%	
Total	67	100%	

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**Q4b: The program maps says there are only two schools that will accept this degree for students who wish to transfer.**

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Agree	32	48%	48%
Disagree	15	22%	22%
Not sure	20	30%	30%
Did not respond	0	0%	
Total	67	100%	

**Q4c: This program map only applies to the years 2020 and 2021.**

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Agree	40	60%	62%
Disagree	9	13%	14%
Not sure	16	24%	25%
Did not respond	2	3%	
Total	67	100%	

**Q4d: "2-year" means this is a plan for community college students.**

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Agree	42	63%	63%
Disagree	8	12%	12%
Not sure	17	25%	25%
Did not respond	0	0%	
Total	67	100%	

**Q4e: The program map says it takes 90.5 units to graduate with an AS-T degree in Mathematics.**

	Count	Percent	Valid Percent
Agree	54	81%	81%
Disagree	1	1%	1%
Not sure	12	18%	18%
Did not respond	0	0%	
Total	67	100%	

**For questions 5-7, here are excerpts from a program map that contains information about Foothill College's Spanish program.**

**First excerpt -- Winter 2021 (Year 1, winter term):**

Winter 2021				
CAT	GE AREA	COURSE	TITLE	UNIT
GE	AREA 1B	ENGL 1B	Composition, Critical Reading & Thinking through Literature	5
MAJOR		SPAN 2	Elementary Spanish II	5
GE	Area 5A		Choose one Physical Science from IGETC Area 5A	4-6
	Area 5C		**Complete the Laboratory for Physical Science	1
<b>TOTAL QUARTER UNITS</b>				<b>15-16</b>

\*\*Students need to select a laboratory with either a Physical Science in Winter 2021 or the Biological Science course scheduled for Spring 2022.

If your Physical or Biological Science course includes a laboratory, you will not need to take a separate course.

Explanation of categories (CAT)	
<b>GE</b>	General Education: A course that fulfills a specific general education requirement. It can be replaced with another course that meets the same GE area.
<b>COREQ</b>	Co-requisite: A course of study required to be taken simultaneously with another course.
<b>PREREQ</b>	Pre-requisite: A course required to be taken before the next course in the sequence.
<b>MAJOR</b>	Major: A course that is required for this AA/AS or ADT degree.
<b>ELEC</b>	Elective: A degree applicable course included to ensure the plan has 90 quarter units <i>which is the minimum units needed to earn a degree or transfer to the UC and CSU systems.</i> An elective can be used to take a course in a subject you are interested in learning more about.

**Second excerpt -- Spring 2022 (Year 2, spring term):**

Spring 2022				
CAT	GE AREA	COURSE	TITLE	UNIT
MAJOR		SPAN 6	Intermediate Spanish III	5
GE	AREA 5B		*Choose one Biological Science from IGETC Area 5B	4-6
GE		SPAN 14A	Advanced Conversation I	4
<b>TOTAL QUARTER UNITS</b>				<b>13-15</b>

\*If you did not take a laboratory for the Physical Science course back in Winter 2021, you will need to take one now.

**Q5: Please indicate whether or not each of the following pieces of information is clear to you when looking at the above program map excerpts.**

**Q5a: General Education (GE) courses needed in Winter 2021.**

	Count	Percent	Valid Percent
Information is CLEAR	64	96%	96%
Information is NOT clear	2	3%	3%
I don't see this information	1	1%	1%
Did not respond	0	0%	
Total	67	100%	

**Q5b: Major courses needed in Winter 2021.**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	63	94%	94%
Information is NOT clear	4	6%	6%
I don't see this information	0	0%	0%
Did not respond	0	0%	
Total	67	100%	

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**Q5c: Unit counts for Winter 2021.**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	65	97%	97%
Information is NOT clear	2	3%	3%
I don't see this information	0	0%	0%
Did not respond	0	0%	
Total	67	100%	

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**Q5d: General Education (GE) courses needed in Spring 2022.**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	62	93%	93%
Information is NOT clear	5	7%	7%
I don't see this information	0	0%	0%
Did not respond	0	0%	
Total	67	100%	

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**Q5e: Major courses needed in Spring 2022.**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	63	94%	94%
Information is NOT clear	3	4%	4%
I don't see this information	1	1%	1%
Did not respond	0	0%	
Total	67	100%	

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**Q5f: Unit counts for Spring 2022.**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	64	96%	97%
Information is NOT clear	1	1%	2%
I don't see this information	1	1%	2%
Did not respond	1	1%	
Total	67	100%	

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**Q6: For each of the following statements about the above program map excerpts, rate whether you agree, disagree, or are not sure.**

**Q6a: I understand the difference between "GE" and "MAJOR" in the program map.**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Agree	64	96%	96%
Disagree	2	3%	3%
Not sure	1	1%	1%
Did not respond	0	0%	
Total	67	100%	

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**Q6b: I know what "GE Area' means.**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Agree	59	88%	88%
Disagree	4	6%	6%
Not sure	4	6%	6%
Did not respond	0	0%	
Total	67	100%	

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**Q6c: I know what "IGETC Area 5A" means.**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Agree	34	51%	51%
Disagree	23	34%	34%
Not sure	10	15%	15%
Did not respond	0	0%	
Total	67	100%	

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**Q7: For each of the following scenarios, indicate whether a student taking these classes in these two terms would satisfy, or would not satisfy, GE Areas 5A, 5B and 5C requirements according to the above program map excerpts (looking at both "Winter 2021" and "Spring 2022"), or if you are not sure.**

**Q7a: Winter 2021: Physical Science alone (no lab) AND  
Spring 2022: Biological Science alone (no lab)**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Would NOT satisfy	44	66%	66%
Would SATISFY	15	22%	22%
Not sure	8	12%	12%
Did not respond	0	0%	
Total	67	100%	

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**Q7b: Winter 2021: Physical Science + Physical Science lab AND  
Spring 2022: Biological Science alone (no lab)**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Would NOT satisfy	4	6%	6%
Would SATISFY	49	73%	74%
Not sure	13	19%	20%
Did not respond	1	1%	
Total	67	100%	

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**Q7c: Winter 2021: Physical Science alone (no lab) AND  
Spring 2022: Biological Science + Biological Science lab**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Would NOT satisfy	23	34%	35%
Would SATISFY	29	43%	45%
Not sure	13	19%	20%
Did not respond	2	3%	
Total	67	100%	

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**Q7d: Winter 2021: Physical Science alone (no lab) AND  
Spring 2022: Biological Science + Physical Science lab**

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	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Would NOT satisfy	21	31%	32%
Would SATISFY	25	37%	38%
Not sure	20	30%	30%
Did not respond	1	1%	
Total	67	100%	

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For questions 8 and 9, here is an excerpt from a program map that contains information about one of Foothill College’s programs:

Career Information
Careers in Chemistry are expected to grow 8.4% nationwide through 2026. The top skills associated with the Chemistry program are Science, Reading Comprehension, Writing, Speaking, Instructing.
Throughout California, these skills, along with the degrees found in parentheses, are useful to the following careers: Natural Science Manager (Bachelors); Average annual salary, \$138,000.00 Chemistry Teacher, Post-secondary (Doctoral or Professional); Average annual salary, \$97,000.00
In the Bay Area, these skills, along with the degrees found in parentheses, are useful to the following careers: Chemical Technician (Associates); Average salary, \$15.85 hourly Forensic Science Technician (Associates); Average salary, \$29.74 hourly Chemist (Bachelors); Average salary, \$25.37 hourly Secondary School Teacher (Bachelors); Average salary, \$28.46 hourly

**Q8:** Please indicate whether or not each of the following pieces of information is clear to you in the above program map excerpt.

**Q8a:** Careers associated with the major.

	Count	Percent	Valid Percent
Information is CLEAR	62	93%	94%
Information is NOT clear	4	6%	6%
I don't see this information	0	0%	0%
Did not respond	1	1%	
Total	67	100%	

**Q8b:** Skill set associated with the major.

	Count	Percent	Valid Percent
Information is CLEAR	58	87%	88%
Information is NOT clear	7	10%	11%
I don't see this information	1	1%	2%
Did not respond	1	1%	
Total	67	100%	

**Q8c: Projected job growth in this area for the local region.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	42	63%	64%
Information is NOT clear	11	16%	17%
I don't see this information	13	19%	20%
Did not respond	1	1%	
Total	67	100%	

---

**Q8d: Projected national job growth in this area.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	61	91%	92%
Information is NOT clear	5	7%	8%
I don't see this information	0	0%	0%
Did not respond	1	1%	
Total	67	100%	

---

**Q8e: The type of degree required for the careers listed.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	58	87%	88%
Information is NOT clear	5	7%	8%
I don't see this information	3	4%	5%
Did not respond	1	1%	
Total	67	100%	

---

**Q8f: How much money a student who graduates with an Associate’s Degree in this major can expect to earn.**

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Information is CLEAR	62	93%	94%
Information is NOT clear	4	6%	6%
I don't see this information	0	0%	0%
Did not respond	1	1%	
Total	67	100%	

**Q9: How important is the following information to you when choosing a major and degree program?**

**Q9a: Whether I think I will enjoy the required courses.**

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Not Important	1	1%	2%
Slightly Important	17	25%	26%
Very Important	48	72%	73%
Did not respond	1	1%	
Total	67	100%	

**Q9b: How difficult the courses look to me.**

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Not Important	2	3%	3%
Slightly Important	24	36%	36%
Very Important	40	60%	61%
Did not respond	1	1%	
Total	67	100%	

**Q9c: How much time it will take to finish.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Not Important	4	6%	6%
Slightly Important	11	16%	17%
Very Important	51	76%	77%
Did not respond	1	1%	
Total	67	100%	

---

**Q9d: Education level needed for the salary I'd like.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Not Important	0	0%	0%
Slightly Important	13	19%	20%
Very Important	53	79%	80%
Did not respond	1	1%	
Total	67	100%	

---

**Q9e: Potential job growth in the field.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Not Important	3	4%	5%
Slightly Important	12	18%	18%
Very Important	51	76%	77%
Did not respond	1	1%	
Total	67	100%	

---

**Q9f: Skills developed by majoring in the field.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Not Important	2	3%	3%
Slightly Important	18	27%	28%
Very Important	45	67%	69%
Did not respond	2	3%	
Total	67	100%	

---

**Q9g: Salary information: National earnings.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Not Important	9	13%	14%
Slightly Important	27	40%	41%
Very Important	30	45%	45%
Did not respond	1	1%	
Total	67	100%	

---

**Q9h: Salary information: State earnings.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Not Important	5	7%	8%
Slightly Important	17	25%	26%
Very Important	44	66%	67%
Did not respond	1	1%	
Total	67	100%	

---

**Q9i: Salary information: Local region earnings.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Not Important	3	4%	5%
Slightly Important	15	22%	23%
Very Important	47	70%	72%
Did not respond	2	3%	
Total	67	100%	

---

**Q10: Which gender do you identify with the most?**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Female	42	63%	64%
Male	21	31%	32%
Non-binary	1	1%	2%
Decline to state	2	3%	3%
Did not respond	1	1%	
Total	67	100%	

---

**Q11: Which racial/ethnic group(s) do you identify with?  
(open-ended)**

African American, Asia, Asian, Asian - Chinese, Asian American, Caucasian, Hispanic, Chinese, Chinese American, Filipino, Latina, Latino, Middle Eastern, Multiracial, Taiwanese, Vietnamese, White, White/Afghan

**Q12: For purposes of reporting, racial/ethnic groups will be rolled up and reporting in the following groupings. Select the one grouping you most closely identify with.**

---

	<b>Count</b>	<b>Percent</b>	<b>Valid Percent</b>
Asian	29	43%	43%
Black or African-American	1	1%	1%
Filipino or Filipina	5	7%	7%
Latino or Latina	9	13%	13%
Middle Eastern	2	3%	3%
White	18	27%	27%
Other: please specify	1	1%	1%
Decline to state	2	3%	3%
Did not respond	0	0%	
Total	67	100%	

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Note: "Other" was specified as Multiracial.