# PACES ONLINE STUDENT SURVEY <br> COHORT A, TIME 1 <br> November 2021, N=15 

PRETEST SURVEY (T1)

1. How did you first hear about this program? (check all that apply) ( $\mathrm{N}=15$ )

| 14 | $(1)$ | From a professor |
| :---: | :--- | :--- |
|  | $(2)$ | From a student |
| 1 | $(3)$ | Email announcement |
|  | (4) | Club/organization |
|  | (5) | Website |
|  | (6) | Other |

2. What are you hoping to get out of this program? Why did you apply?

I'm hoping to get good resources and advice
I am just taking this survey as a requirement of my course.
Learning
I am not entirely sure what I would be getting out of this program.
To learn
To learn better studying tips, and good work ethic
I'm hoping to get further guidance on what I'd like to focus on as a career, and applied to get mentors to help me in that process.
Learning more about research tactics and stem opportunities.
I actually don't know what this survey is about, but it was assigned to me.

Not sure just something new to try
I applied from a link from my professor.
I am hoping to be able to finish school earlier than expected. I want to finish 1 year earlier which is why I applied.
I am hoping to gather skills for my future career and get more exposure to other stem fields. I applied to further myself into different areas of science and see it for myself in the real world.
I am hoping to get to know more about the course. I applied because it is part of my GE transfer requirement.

When we ask about "STEM," we mean "Science, Technology, Engineering, and Mathematics."
3. Please indicate how much you disagree or agree with the following statements: ( $\mathrm{N}=15$ )

| (rotated statements <br> in online survey) | Strongly <br> disagree <br> (1) | Disagree <br> (2) | Neutral <br> (3) | Agree <br> (4) | Strongly <br> Agree <br> (5) | Mean <br> (1-5) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Science is very <br> interesting. | $7 \%$ |  | $14 \%$ | $43 \%$ | $36 \%$ | 4.0 |
| I plan to <br> incorporate science <br> into my career. | $7 \%$ | $14 \%$ | $7 \%$ | $29 \%$ | $43 \%$ | 3.9 |
| I understand the <br> types of careers <br> that are available <br> to scientists. |  | $27 \%$ | $33 \%$ | $27 \%$ | $13 \%$ | 3.3 |
| I know the steps to <br> take to pursue a <br> career science. |  | $27 \%$ | $27 \%$ | $40 \%$ | $7 \%$ | 3.3 |
| Someone like me can <br> succeed as a <br> scientist. |  | $13 \%$ | $33 \%$ | $40 \%$ | $13 \%$ | 3.5 |
| I'm aware of STEM <br> research and <br> internship <br> opportunities for <br> college students. |  | $13 \%$ | $40 \%$ | $27 \%$ | $20 \%$ | 3.5 |

4. What are your career goals? (check all that apply) (N=14)

| $29 \%$ | $(1)$ University-based science researcher/professor |
| :---: | :--- |
| $57 \%$ | $(2)$ |
|  | Health professions/medical |
| $21 \%$ | $(4)$ |
| (4) Science industry or biotechnology |  |
| $7 \%$ | $(5)$ |
|  | Environmental science |
| $7 \%$ | (7) Energy sector |
| $14 \%$ | (8) K-12 education |
| $29 \%$ | (9) Undecided |
| $21 \%$ | (10) Other, please specify* |
| *"Interior design," "PM in Computer Science," "Software engineer," |  |
| "Business owner" |  |

5. Please indicate your level of interest in doing the following: ( $\mathrm{N}=15$ )

| (rotated <br> Statements in <br> online survey) | Not at all <br> interested <br> (1) | A little <br> (2) | Somewhat <br> (3) | Very <br> (4) | Extremely <br> interested <br> (5) | Mean <br> $(1-5)$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Taking STEM <br> classes in <br> college | $7 \%$ | $20 \%$ | $20 \%$ | $13 \%$ | $40 \%$ | 3.6 |
| Having a STEM <br> internship/resea <br> rch experience <br> during college | 7\% | $13 \%$ | $27 \%$ | $20 \%$ | $33 \%$ | 3.6 |
| Transferring to <br> a four-year <br> college |  | $7 \%$ | $7 \%$ |  | $86 \%$ | 4.6 |
| Graduating from <br> a four-year <br> college with a <br> STEM degree | $20 \%$ |  | $33 \%$ | $7 \%$ | $40 \%$ | 3.5 |
| Pursuing post- <br> graduate work in <br> STEM (Master's <br> degree, Ph.D.) | $7 \%$ | $13 \%$ | $40 \%$ | $7 \%$ | $33 \%$ | 3.5 |
| Pursuing a post- <br> graduate degree <br> in the medical <br> field <br> (physician, <br> nurse, <br> pharmacist, <br> physical <br> therapy, etc.) | $14 \%$ | $7 \%$ | $36 \%$ | $14 \%$ | $29 \%$ | 3.4 |

6. Thinking about your career plans with regards to STEM in general, where do you place your plans along this scale? In this case, "STEM" does NOT include the medical field or health professions. ( $\mathrm{N}=15$ )

| $13 \%$ | (1) Definitely NOT planning to have a career in STEM |
| :---: | :--- | :--- |
| $33 \%$ | (2) Probably not planning to have a career in STEM |
| $20 \%$ | (3) Having a career outside of STEM that still <br> incorporates STEM |
| $7 \%$ | (4) Probably planning a career in STEM |
| $27 \%$ | (5) Definitely planning to have a career in STEM |

7. Thinking about your career plans with regards to the medical field or health professions, where do you place your plans along this scale? This could include a career as a physician, nurse, physical therapist, pharmacist, dentist, etc. ( $\mathrm{N}=15$ )

| $13 \%$ | (1) Definitely NOT planning to have a career in the <br> medical field or health professions |
| :---: | :--- |
| $27 \%$ | (2) Probably not planning to have a career in the <br> medical field or health professions |
| $13 \%$ | (3) Having a career outside of the health professions <br> that still incorporates the health professions |
| $27 \%$ | (4) Probably planning a career in the medical field or <br> health professions |
| $20 \%$ | (5) Definitely planning to have a career in the medical <br> field or health professions |

8. How confident are you in your ability to do the following? (N=14)

| (rotated statements in online survey) | Not at all confident (1) | A little <br> (2) | Somewhat <br> (3) | Very <br> (4) | Extremely confident (5) | $\begin{aligned} & \text { Mean } \\ & (1-5) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pursue a STEM major in college | 14\% | 7\% | 29\% | 14\% | 36\% | 3.5 |
| Succeed in collegelevel STEM classes | 21\% | 14\% | 14\% | 36\% | 14\% | 3.1 |
| Quantitative thinking and problem solving |  | 27\% | 13\% | 53\% | 7\% | 3.4 |
| Explain the scientific method | 8\% |  | 39\% | 23\% | 31\% | 3.7 |
| Conduct science literature searches | 21\% | 21\% | 14\% | 29\% | 14\% | 2.9 |
| Give presentations of scientific work | 21\% | 14\% | 21\% | 29\% | 14\% | 3.0 |
| Write up scientific research results | 14\% | 21\% | 29\% | 14\% | 21\% | 3.1 |
| Approach a science professor with a question | 23\% | 8\% | 15\% | 23\% | 31\% | 3.3 |
| Communicate scientific concepts to the general public (friends/family without a scientific background) | 14\% | 14\% | 29\% | 29\% | 14\% | 3.1 |
| Develop a transfer plan to a four-year college | 7\% |  | 14\% | 57\% | 21\% | 3.9 |
| Transfer to a four-year college |  | 7\% | 14\% | 36\% | 43\% | 4.1 |
| Find STEM resources for transfer students at a four-year college | 14\% | 7\% | 43\% | 7\% | 29\% | 3.3 |
| Participate in STEM opportunities beyond coursework while at a four-year college | 21\% | 21\% | 14\% | 21\% | 21\% | 3.0 |

9. Please indicate how much you disagree or agree with the following statements: ( $\mathrm{N}=14$ )

| (rotated statements <br> in online survey) | Strongly <br> disagree <br> (1) | Disagree <br> (2) | Neutral <br> (3) | Agree <br> (4) | Strongly <br> Agree <br> (5) | Mean <br> (1-5) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| I have STEM peers <br> who support me | $14 \% \%$ | $14 \%$ | $14 \%$ | $21 \%$ | $36 \%$ | 3.5 |
| I have a STEM mentor <br> who supports me | $27 \%$ | $7 \%$ | $27 \%$ | $20 \%$ | $20 \%$ | 3.0 |
| I feel a part of the <br> STEM community at my <br> college | $7 \%$ | $29 \%$ | $29 \%$ |  | $36 \%$ | 3.3 |

10. What is your gender? ( $\mathrm{N}=15$ )

| 7 | $(1)$ |
| :--- | :--- |
| 6 | (2) | Male,\(~\left(\begin{array}{ll}Non-binary <br>

\hline 2 \& (3) <br>
\hline \& (4) <br>
\hline\end{array}\right.\)
11. What is your year in college for the $2021 / 2022$ academic year? ( $\mathrm{N}=15$ )

12. Which of the following best describes your ethnicity? (check all that apply) ( $\mathrm{N}=15$ )

|  | (1) African-American/Black |
| :--- | :--- |
| 4 | (2) | Asian-American/Asian

[^0]13. Do you identify as a first-generation college student? ( $\mathrm{N}=15$ )

| 7 | $(1)$ No |
| :--- | :--- |
| 6 | (2) Yes |
| 2 | (3) Not sure |
|  | (4) Other, please specify |

14. Which community college is your LACCD home institution? ( $\mathrm{N}=15$ )

| 1 | (1) | LA Valley College |
| :---: | :---: | :--- |
| 14 | $(2)$ | Pierce College |
|  | $(3)$ Other, please specify: |  |

15. Have you taken/are you taking STEM classes at a different college aside from your home college? ( $\mathrm{N}=15$ )

| 10 | (1) | No |
| :---: | :--- | :--- |
| 5 | (2) Yes, please specify: |  |

Cal State LA LA Valley College (2)
LA City College LA Trade Tech College
16. Have you declared a major? ( $\mathrm{N}=15$ )

| 4 | (1) | No |
| :---: | :--- | :--- |
| 11 | (2) Yes, please specify: |  |

Behavioral Science/Economics
Business Administration
Computer Science (2)
Criminal Justice
Education/Psychology
English (K-12 Education)
Microbiology (2)
Nursing
"Psychobio (UCLA), Neurobiology (UCI), Cog Sci (Oxy) and more" Psychology

Ask only if they have declared a major:
17. Have you ever changed your major? ( $N=11$ )

| 6 | (1) No |
| :--- | :--- |
| 5 | (2) Yes, from what did you change it? <br> (please specify) : |

Biology
Business Information Management
Health
Nursing (2)
18. Did you participate in the 8 -week Summer Chemistry Enrichment Program at LAVC, hosted by PASO? ( $N=15$ )

| 15 | (1) | No |
| :---: | :---: | :--- |
| 0 | (2) | Yes, 2021 |
| 0 | $\mathbf{( 3 )}$ | Yes, 2020 |

19. Please indicate if you have taken or plan to take the following college-level STEM classes:
Note that a few course numbers and offerings differ between LA Pierce College and LA Valley College. ( $\mathrm{N}=15$ )

|  | Already Taken (1) | Currently Taking (2) | Definitely Plan to Take (3) | Might Take <br> (4) | Do Not Plan to Take (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Anthropology 101 (Human Biological Evolution) | 2 |  | ) | 1 | 10 |
| Anatomy 1 (Intro to Human Anatomy) | 1 |  |  | 8 | 6 |
| Astronomy 1 (Elementary Astronomy) | 2 |  |  | 3 | 10 |
| Astronomy 5 (Fundamentals of Astronomy) |  |  | 1 | 2 | 12 |
| Biology 6 (General Biology I) | 3 | 1 | 5 | 1 | 5 |
| Biology 7 (General Biology II) | 1 | 2 |  | 6 | 6 |
| Biology 40 (The Science of Biotechnology) |  |  |  | 4 | 10 |
| Biology 110 (Genetics and Biotechnology) | 1 |  |  | 4 | 10 |
| Chemistry 51 (Fundamentals of Chemistry) |  |  | 1 | 2 | 12 |
| Chemistry 60 (Intro to General Chemistry) | 5 |  | 2 | 3 | 5 |
| Chemistry 68 (Preparation for General Chemistry) |  |  |  | 3 | 11 |
| ```Chemistry 101 (General Chemistry I)``` | 4 |  | 1 | 2 | 8 |
| Chemistry 102 (General Chemistry II) | 3 |  | 1 | 3 | 8 |
| Chemistry 211 (Organic Chemistry for Science Majors I) | 1 |  | 2 | 3 | 9 |


| Chemistry 212 (Organic Chemistry for Science Majors II) |  | 1 | 2 | 3 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Computer Science 101 (Intro to Computer Science) | 1 |  | 1 | 5 | 8 |
| Computer Science 117 (Intermediate Programming Using C/C++) | 1 |  | 2 | 2 | 10 |
| Engineering 101 (Intro to Science, Engineering, and Technology) |  |  | 2 | 4 | 9 |
| Environmental Sci 1 (Intro to Environmental Science) |  |  | 2 | 5 | 8 |
| Geography 1 (Physical Geography) |  |  | 2 | 3 | 10 |
| ```Geology 1 (Physical Geology)``` |  |  | 1 | 3 | 10 |
| Oceanography 1 (Intro to Oceanography) | 2 |  |  | 3 | 10 |
| Physiology 1 (Intro to Human Physiology) | 2 |  | 1 | 5 | 7 |
| $\begin{aligned} & \text { Physics } 6 \& 7 \text { (General } \\ & \text { Physics I \& II) } \end{aligned}$ |  |  | 2 | 3 | 10 |
| Physics 37,38,39 or <br> 101,102,103 (Physics for <br> Engineers and Scientists <br> I, II, \& III) |  |  |  | 4 | 11 |
| Physics 66 \& 67 (Physics with Calculus for Life Science Majors I \& II) |  | 2 | 1 | 4 | 8 |
| Math 261/262 (Calculus 1 \& 2) | 4 | 3 | 1 | 2 | 4 |
| Math 227 (Statistics) | 2 | 1 | 7 | 2 | 3 |
| Other STEM class (please specify) * | 1 | 1 | 1 | 1 | 8 |

[^1] Biology 3.


[^0]:    *"Persian," "Mixed"

[^1]:    *Anthropology 118, Anthropology 119, Psychology, Statistics 101,

