ASSOCIATE DEGREE FOR TRANSFER (AA-T) – MATH

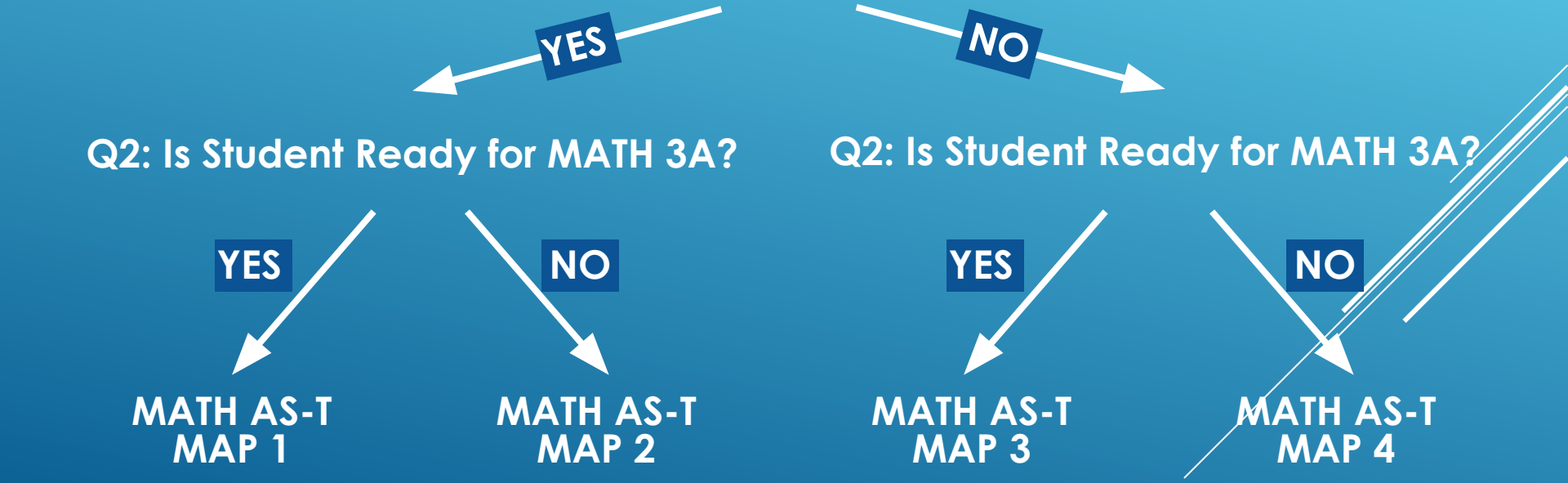
Guided Pathways Flex Day Presentation

October 22, 2019

DECISION TREE

for the 4 maps

Q1: Will Student Transfer to Engineering/Physical Sciences?



MAP 1: Starting at MATH 3A, with PHYS 4A

Semester	Course #	Course Title	#Units
Fall 1	Math 3A	Calculus 1	5
	Engl 1A or Engl 1AS	English Composition & Reading or [the same] with support	4 or 5
	Soc 5 or Econ 2	Minority Groups or Microeconomics	3
	Coun 24 or Coun 57	College Success or Career Exploration	3
		Semester Total	**15**
Spring 1	Math 3B	Calculus 2	5
	Engl 5	Critical Thinking	3
	Comm 1A or Comm 45	Intro to Speech or Public Speaking	3
	Music 15A or Art 1	Jazz, Blues, and Popular Music or Intro to Art History	3
	US History	History 7A or Hist 7B	3
		Semester Total	**17**

MAP 1: Starting at MATH 3A, with PHYS 4A

Semester	Course #	Course Title	#Units
Fall 2	Math 3C	Calculus 3	5
	Phys 4A	General Physics with Calculus	5
	US Government	PoSci 1	3
	Engl 1B	Composition and Reading	4
		Semester Total	**17**
Spring 2	Math 3E	Linear Algebra	3
	Math 3F	Differential Equations	3
	Psych 1A or Comm 6	General Psychology or Intercultural Communications	3
	Bio 10 or Anthro 1	Intro to Biology or Intro to Physical Anthropology	4 or 3
		Semester Total	**12**

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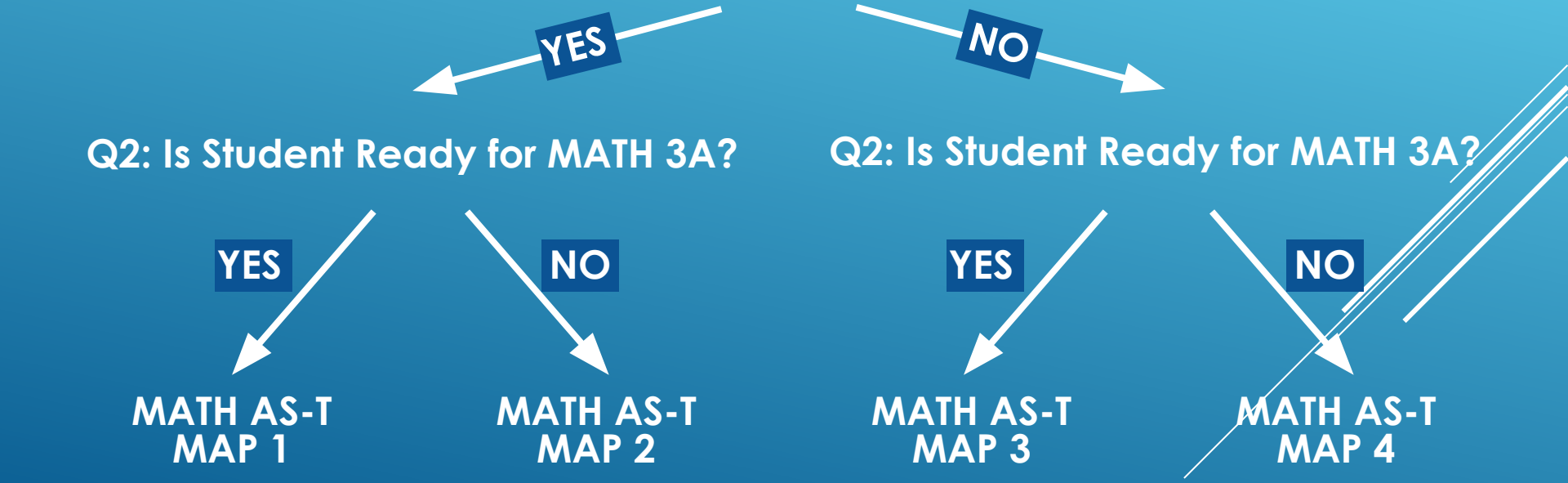

MAP 2: Starting at MATH 50 and 1, with PHYS 4A

Semester	Course #	Course Title	#Units
Fall 1	Math 50	Trigonometry	3
	Math 1	Pre-Calculus	4
	Engl 1A or Engl 1AS	English Composition & Reading or [the same] with support	4 or 5
	Soc 5 or Econ 2	Minority Groups or Microeconomics	3
	Coun 24 or Coun 57	College Success or Career Exploration	3
		Semester Total	**17**
Spring 1	Math 3A	Calculus 1	5
	Engl 5	Critical Thinking	3
	Comm 1A or Comm 45	Intro to Speech or Public Speaking	3
	Music 15A or Art 1	Jazz, Blues, and Popular Music or Intro to Art History	3
	US History	History 7A or Hist 7B	3
		Semester Total	**17**

MAP 2: Starting at MATH 50 and 1, with PHYS 4A

Semester	Course #	Course Title	#Units
Summer 2	Math 3B	Calculus 2	**5**
Fall 2	Math 3C	Calculus 3	5
	Phys 4A	General Physics with Calculus	5
	US Government	PoSci 1	3
	Engl 1B	Composition and Reading	4
		Semester Total	**17**
Spring 2	Math 3E	Linear Algebra	3
	Math 3F	Differential Equations	3
	Psych 1A or Comm 6	General Psychology or Intercultural Communications	3
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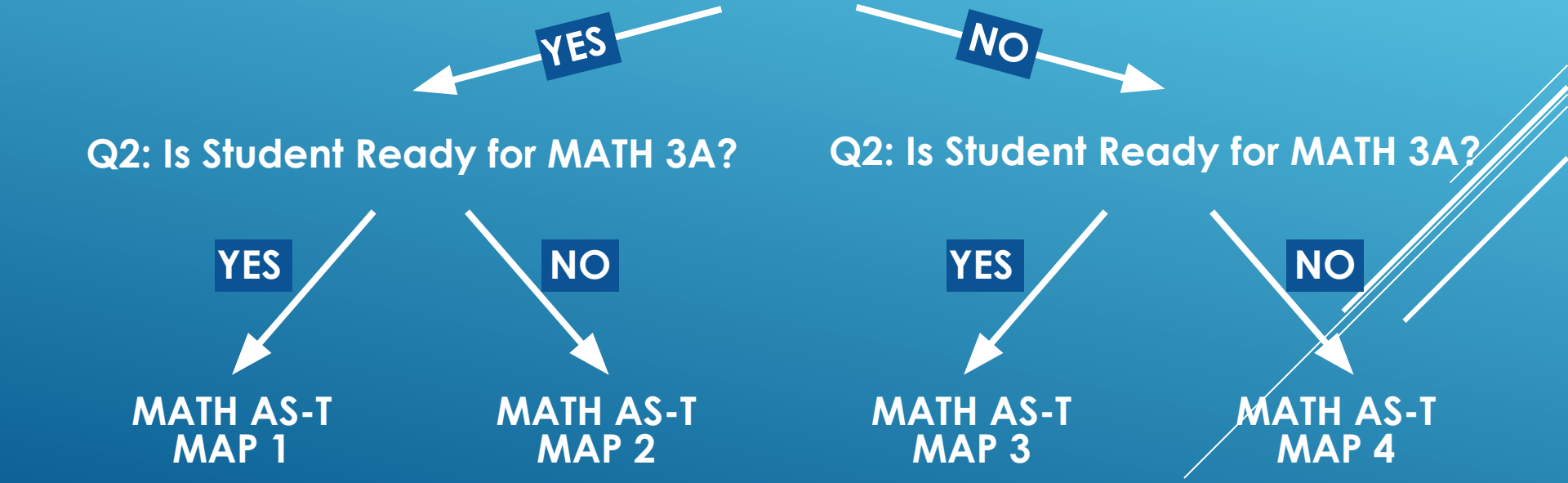

MAP 3: Starting at MATH 3A, without PHYS 4A

Semester	Course #	Course Title	#Units
Fall 1	Math 3A	Calculus 1	5
	Engl 1A or Engl 1AS	English Composition & Reading or [the same] with support	4 or 5
	Soc 5 or Econ 2	Minority Groups or Microeconomics	3
	Coun 24 or Coun 57	College Success or Career Exploration	3
		Semester Total	**15**
Spring 1	Math 3B	Calculus 2	5
	Engl 5	Critical Thinking	3
	Comm 1A or Comm 45	Intro to Speech or Public Speaking	3
	Music 15A or Art 1	Jazz, Blues, and Popular Music or Intro to Art History	3
	US History	History 7A or Hist 7B	3
		Semester Total	**17**

MAP 3: Starting at MATH 3A, without PHYS 4A

Semester	Course #	Course Title	#Units
Fall 2	Math 3C	Calculus 3	5
	Phys 10 or Geog 1	Intro to Physics or Physical Geography	4 or 3
	US Government	PoSci 1	3
	Engl 1B	Composition and Reading	4
		Semester Total	**15**
Spring 2	Math 3E	Linear Algebra	3
	Math 3F	Differential Equations	3
	Psych 1A or Comm 6	General Psychology or Intercultural Communications	3
	Bio 10 or Anthro 1/1L	Intro to Biology or Intro to Physical Anthropology (with Lab)	4
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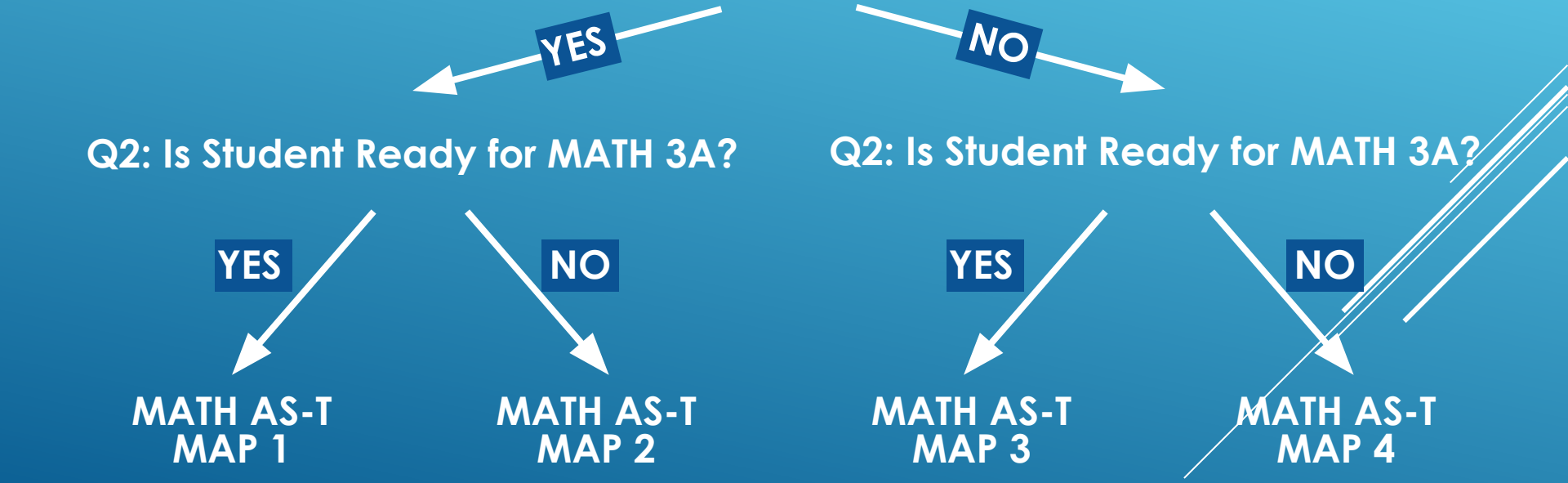

MAP 4: Starting at MATH 50 and 1, without PHYS 4A

Semester	Course #	Course Title	#Units
Fall 1	Math 50	Trigonometry	3
	Math 1	Pre-Calculus	4
	Engl 1A or Engl 1AS	English Composition & Reading or [the same] with support	4 or 5
	Soc 5 or Econ 2	Minority Groups or Microeconomics	3
	Coun 24 or Coun 57	College Success or Career Exploration	3
		Semester Total	**17**
Spring 1	Math 3A	Calculus 1	5
	Engl 5	Critical Thinking	3
	Comm 1A or Comm 45	Intro to Speech or Public Speaking	3
	Music 15A or Art 1	Jazz, Blues, and Popular Music or Intro to Art History	3
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Semester	Course #	Course Title	#Units
Summer 2	Math 3B	Calculus 2	**5**
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		Semester Total	**13**

RESPONSES to QUESTIONS

WHAT THOUGHT PROCESS HELPED YOU MAKE YOUR DECISIONS?

- We wanted to accommodate both the engineering student (who would take Physics 4A) and the pure math student who may not be interested in taking Physics 4A.
- In the pure math pathway (with minimal science)
  - Included Math 3F for students who would want to major in Math for 4-year degree (Math 13 would be another option for Stat major)
  - Offering Physics 10 and Geography 1 early on so that students still have opportunity to change their mind and pursue engineering pathway.

WHAT THOUGHT PROCESS HELPED YOU MAKE YOUR DECISIONS?

- For CSU GE areas, we thought about useful classes for Math Majors, such as Economics, as well as providing broad exposure to different subjects such as communications and English.
- We decided to add a counseling class (area E requirement) early on to help students evaluate their major and/or career path early in their pathway.
- We included English 1B because it is recognized by HBCUs and all UCs for one year of English.

WHAT THOUGHT PROCESS HELPED YOU MAKE YOUR DECISIONS?

- We included Sociology 5 since it is a UC Berkeley American Cultures requirement (a quirky graduation requirement that only Sociology 5 meets), for those students aiming for Cal.
- We recommended Biology 10 because if does not have any prerequisite classes. (e.g., compared to Biology 1A).
  - For engineering majors, they will need to additional planning to fit in required chemistry, biology, and additional physics classes (may not be possible to fit in 2 years).

WHAT WERE THE MOST CHALLENGING AND ENGAGING PARTS OF THE PROJECT?

- Challenging: narrowing down all the possibilities.
- Challenging: deciding which general education classes to recommend.
- Engaging: Working with people outside of the discipline who have a different perspective (although this was challenging too).

WHAT ARE YOU MOST EXCITED ABOUT IN RELATIONSHIP TO WORKING WITH OTHER DISCIPLINES?

- Working with people from each discipline was great and helpful to put faces with names.
- Seeing how our decisions in our respective areas are implemented.

WHAT ARE YOU MOST CONCERNED ABOUT IN ANY ASPECT OF IMPLEMENTATION OF YOUR MAP?

- Making sure engineering students are looking at the required classes.
- Students have a packed schedule.
  - **Possible Solution**: by intentionally leaving summers open whenever possible, we can accommodate students who may need to retake a class.
- Students just sticking to the pathway and not exploring other options.
  - **Possible Solution**: counselors play an important role in making sure students don't just stick to the pathway but rather help students choose classes they will enjoy.

QUESTIONS?