


To support our students in achieving their academic goals, we want to clarify the following:

- Pathway to AA/AS Degree
- STEM Pathway to Transfer
- Non-STEM Pathway to Transfer
- Technical Math Pathways


## Pathway to AA/AS Degree: Currently



## Math 50

Core Intermediate Algebra, 4 units Satisfies AA/AS

## Math 55

Intermediate Algebra 5 units
Satisfies AA/AS

# Pathway to AA/AS Degree: Effective Fall 2018 



## Pathway to Transfer NonSTEM: Currently

Math 504 units
Core Intermediate Algebra
OR
Math 55
Intermediate Algebra 5 units

Math 40 UC*/CSU 4units Intro Probability and Statistics

## Math 47 UC*/CSU

Math for Liberal Arts, 3 units

## Math 33 UC*/CSU

Finite Mathematics, 4 units


## Pathway to Transfer Non-STEM: Effective Fall 2018

Intermediate Algebra for STEM, 5 units


## Math 33 UC*/CSU

 Finite Mathematics, 4 units| Math 55 <br> Intermediate Algebra for <br> STEM, 5 units | $\longrightarrow \|$Math 34 UC*/CSU <br> Calculus for Business and <br> Social Sciences, 5 units |
| :---: | :---: |

## Pathway to Transfer STEM: Currently



## Pathway to Transfer STEM: Effective Fall 2018



# Technical Math Pathway: Currently 

Math $71 \mathrm{~A}, 1.5$ unit
Applied Math for Technicians A

Math 71 B, 1.5 unit
Applied Math for Technicians B

Required math for a certificate in Welding Technology

## Technical Math Pathway to Certificate: Effective Fall 2018



Math 72 C, 1 unit
Technical Elementary Algebra C

Math 53 A, 2 units
Technical Intermediate Algebra A

## This sequence satisfies the requirement for Welding Certificate.

This sequence is also equivalent to former sequence $71 A+71 B$.

## Technical Math Pathway to AA/AS: Effective Fall 2018



This 7 unit
sequence is in-context of Automotive or Welding and satisfies the math requirement for AS. Degree.

This pathway does not lead to transfer level math classes.

## Acceleration and Support

- Math Jam

Prepare for upcoming math class or retake placement test - week before semester starts.

- Co-Requisite Courses

2-unit support courses taught by same instructor as lecture classes provide rigorous support in mastering math concepts and key learning skills to succeed in college.

- Fast Track

Two courses offered back to back in 8-week, 8-week sessions during regular Fall or Spring terms.

## Acceleration and Support

Non-Credit Hope for the Future
If non-credit is adopted by the District, LPC Math
Department is interested in converting the following courses into non-credit:

- Math 107
- Math 110
- Math Jam
- Co-requisite Support Courses, basic skills and transfer levels

We believe these curriculum changes would allow us to create non-credit certificates that would satisfy CDCP funding requirements and help to institutionalize many of these necessary student supports.


## Math Jam Spring 2018

## Successful January 2018 Math Jam!

- 220 participants ranging from PreAlgebra to Pre-Calculus.
- 101 participants jumped on Friday into a higher math class with multiple measures for placement.

Ex: 6 Pre-Algebra students jumped into Statistics - 3 semesters!

## Math Jam Spring 2018

Students at our college who attended Math Jam improved dramatically...

- Math Jam participants have approximately $10 \%$ higher success rate in their subsequent math course compared to the general population.
- Students who re-took the Placement exam and "jumped" a math class are also very successful.


## Acceleration and Support

## ACCELERATED Two Semester Option Track NON-STEM TRANSFER

Fall Semester
Spring Semester

| Math 110 <br> (formerly 65) Elementary Algebra <br> 4 units | and | Math 50 <br> Core Intermedi- <br> ate Algebra <br> 4 units <br> Satisfies AA/AS |
| :---: | :---: | :---: |
| + |  | Math 40 <br> Statistics and <br> Probability <br> 4 units <br> UC \& CSU <br> Transferable |
| Math 110C |  |  |
| Elementary Algebra Co-Requisite <br> Support, 2 units |  |  |

## Acceleration and Support

## ACCELERATED Two Semester Option Track for STEM

Fall Semester
Math 55
Intermediate Algebra for STEM 5 units Satisfies AA/AS
$+$

## Math 55C

Intermediate Algebra for STEM Support, 2 units Spring Semester

| Math 30 |
| :---: |
| College Algebra |
| for STEM 4 units |
| UC \& CSU Trans- |
| ferable |

Fast-Track 8 weeks

Math 39
Trigonometry 4 units CSU
Transferable

Fast-Track 8 weeks

## Individual Reflection

Please reflect on the following questions:

- How will these changes impact your interactions with students? (pink)
- How can we as a college support students in streamlining and understanding their academic pathways? (green)
- What additional structural/curriculum changes need to happen to support ou students? These changes do not have to be math specific. (purple)


## LPC FLEX Survey

Thank you for coming!

Please take a moment to fill out the LPC FLEX Day "Professional
Development Workshop Evaluation Form."

Leave them on your tables before you go so that we can collect the information and continue to improve as a college.


## LPC Math Assessment Recommendations

## -Spring 2018 Assessment Period (10/2/171/29/18)

| Recommended Math Placement | If Test Only |  | If MM Only | Actual Placement |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Math 1 - Calculus | 24 | $4 \%$ | 33 | $5 \%$ | 47 | $7 \%$ |
| Math 20 - Pre-Calculus | 35 | $5 \%$ | 40 | $6 \%$ | 62 | $9 \%$ |
| Math 38/39/35/45 - Trig \& STEM Transfer | 72 | $11 \%$ | 82 | $12 \%$ | 113 | $17 \%$ |
| Math 40/47/33 - Stat \& Non-STEM Transfer | 101 | $15 \%$ | 100 | $15 \%$ | 140 | $21 \%$ |
| Math 50/55 - Intermediate Algebra | 101 | $15 \%$ | 131 | $19 \%$ | 61 | $9 \%$ |
| Math 65 - Elementary Algebra | 181 | $27 \%$ | 0 | $0 \%$ | 150 | $22 \%$ |
| Math 107 - Pre-Algebra | 151 | $22 \%$ | 0 | $0 \%$ | 99 | $15 \%$ |
| No Recommendation | 7 | $1 \%$ | 286 | $43 \%$ | 0 | $0 \%$ |
| Total Placements | $\mathbf{6 7 2}$ | $100 \%$ | $\mathbf{6 7 2}$ | $100 \%$ | $\mathbf{6 7 2}$ | $100 \%$ |

## LPC Math Assessment Recommendations

-Spring 2018 Assessment Period (10/2/171/29/18)

| Recommended Math Placement | Test |  | Multiple Measures | Both Methods | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Math 1 - Calculus | 14 | $30 \%$ | 23 | $49 \%$ | 10 | $21 \%$ | 47 |
| Math 20 - Pre-Calculus | 25 | $40 \%$ | 35 | $56 \%$ | 2 | $3 \%$ | 62 |
| Math 38/39/35/45 - Trig \& STEM Transfer | 43 | $38 \%$ | 54 | $48 \%$ | 16 | $14 \%$ | 113 |
| Math 40/47/33 - Stat \& Non-STEM Transfer | 57 | $41 \%$ | 70 | $50 \%$ | 13 | $9 \%$ | 140 |
| Math 50/55 - Intermediate Algebra | 61 | $100 \%$ | 0 | $0 \%$ | 0 | $0 \%$ | 61 |
| Math 65 - Elementary Algebra | 78 | $52 \%$ | 30 | $20 \%$ | 42 | $28 \%$ | 150 |
| Math 107 - Pre-Algebra | 99 | $100 \%$ | 0 | $0 \%$ | 0 | $0 \%$ | 99 |
| Total Placements | $\mathbf{3 7 7}$ |  | $\mathbf{2 1 2}$ |  | $\mathbf{8 3}$ |  | $\mathbf{6 7 2}$ |

## What about the 286?



## Additional Placement Information

Assembly Bill No. 705 may legislate additional changes to the placement and curriculum.
Assembly Bill No. 1805 may legislate transparency of all multiple measure rules on college websites.

This could impact English, ESL and Math if passed, with compliance required by Fall 2019.

