#### INTEROFFICE CORRESPONDENCE Los Angeles Unified School District Division of Instruction

ГО:	High School Principals	

**DATE:** January 13, 2020

FROM: Patricia Heidemann Administrator, High School Instruction

#### SUBJECT: INTENT TO OFFER INTRODUCTION TO DATA SCIENCE (IDS), TRANSITION TO COLLEGE MATH AND STATISTICS (TCMS), AND/OR FINANCIAL ALGEBRA

The purpose of this interoffice correspondence is to provide information regarding alternative courses in mathematics. Introduction to Data Science (IDS), Transition to College Math and Statistics (TCMS), and Financial Algebra provide rigorous curricula that is accessible to students through inquiry-based practice and real-world, relevant application to mathematics. All three courses are approved by University of California Office of the President (UCOP) to meet "c" mathematics courses for "a-g."

These courses were created to provide alternative math pathways for students that focus on practical application of mathematical concepts. IDS and TCMS, in particular, are designed to prepare students for the rigors of transfer-level math courses at community college and university. These students would not be in a pathway toward calculus but may follow up the course with Advanced Placement Statistics. For more information on math pathways, see *REF-069702.0, High School Mathematics Placement and Pathways*, dated April 3, 2019.

Teachers new to teaching IDS, TCMS, and/or Financial Algebra in the 2020-2021 school year must attend professional development to prepare them with the knowledge and skills needed to teach the courses as designed. Schools are asked to fill out the attached *Intent to Offer* form(s) so that the Division of Instruction can support teachers in their professional development to teach these courses. The professional development focuses on content as well as pedagogy that emphasizes the math practices.

#### INTRODUCTION TO DATA SCIENCE

The IDS course is a result of a Math-Science Partnership grant called Mobilize funded by the National Science Foundation, offered in collaboration with the University of California, Los Angeles (UCLA). The purpose of the course is to introduce students to dynamic data analysis used to make decisions and predictions and to computer coding. It blends statistics with computing. The course provides students an alternative high school mathematics pathway that will prepare them for careers that rely on statistical reasoning and analysis, such as Statistics, Biology, the Social Sciences, and Law. Students will learn how to collect authentic data, then analyze and interpret the data by coding in RStudio. Schools offering IDS should be prepared to provide a 1:1 computer-to-student ratio daily. IDS may be taken in lieu of or subsequent to Algebra 2. Successful completion of the course validates a third-year mathematics requirement. For more information on the IDS course, please visit https://www.introdatascience.org/ids-in-the-media.

#### TRANSITION TO COLLEGE MATH AND STATISTICS

TCMS is a fourth-year college preparatory mathematics course developed in collaboration with California State University, Northridge (CSUN). The purpose of TCMS is to ensure college readiness for students who complete Algebra 1, Geometry, and Algebra 2 to place in a college level course for both STEM-majors and non-STEM majors. TCMS integrates the use technology and incorporates problem-solving inquiry-oriented lessons to develop a rich understanding of mathematics through new situations and problems by investigations of real-life contexts. Transition to College Math and Statistics (TCMS) is intended as a fourth year math option for seniors who have taken Algebra 2 and beyond, but scored at "Standard Nearly Met or Not Met" in the grade 11 Early Assessment Program (EAP) tested through the Smarter Balanced Assessment (SBA).

#### FINANCIAL ALGEBRA

Financial Algebra courses provide an alternative math course pathway for high school students. The courses are equivalent to Algebra I and Algebra II. Financial Algebra 1AB and Financial Algebra 2AB are suitable for all students who are interested in finance and business including, but not limited to, students in Linked Learning schools and Small Learning Communities (SLC) with a finance and business emphasis. The Financial Algebra course extends students' understanding of functions and real numbers and increases the tools students have for modeling real world scenarios involving business and finance. The course assists students in making sense of the financial world around them and effectively managing fiscal resources through meaningful mathematical modeling. The course emphasizes the use of mathematics to model and explore the real world of financial phenomena including interpreting and justifying reasoning to make data supported financial decisions.

For questions, please contact the Secondary Mathematics Coordinator in the Division of Instruction at (213) 241-6444 or the Mathematics Coordinator at the local district.

ATTACHMENT A: Intent to Offer Introduction to Data Science ATTACHMENT B: Intent to Offer Transition to College Math and Statistics ATTACHMENT C: Intent to Offer Financial Algebra

 c: Alison Yoshimoto-Towery Local District Superintendents Administrators of Instruction Jesus Angulo Secondary Mathematics Coordinators, Central and Local District Offices Counseling Coordinators, Central and Local District Offices Instructional Technology Initiative Director and Coordinators

## Intent to Offer Introduction to Data Science 2020-2021

The purpose of the Introduction to Data Science (IDS) course is to introduce students to dynamic data analysis used to make decisions and predictions and to computer coding. The Mobilize project has created a yearlong curriculum specifically for this course. LAUSD Textbook Services Division has noted this on the High School Williams List of District-Adopted and District-Approved Textbooks as "Teacher Created Materials." IDS teachers will already have the materials necessary for this course and will receive professional development on the use of these materials during the training. <u>Schools do not need to purchase any additional software or materials for this course</u>.

I understand the purpose of the IDS. I and agree to provide the intended course as designed with appropriate support.

#### Principals should complete this form to indicate their intent to offer IDS.

#### Please scan and email the completed form to: Patricia Heideman, Administrator of High School Instruction, Division of Instruction at <u>pheidema@lausd.net</u> Deadline to Return Form: Friday, February 28, 2020

School Name	Location Code						
	Local District	NW	NE	_ <u>S</u>	_C	_E _	_W
Principal Name	LAUSD Email					@laus	sd.net
AP SCS Name	LAUSD Email					@laus	sd.net
Math Coord. Name	LAUSD Email					@laus	sd.net

I recommend the following teacher to be trained for the course:

#### Introduction to Data Science: Roster-Carrying Teacher for 2020-2021

	Assigned Math Teacher	LAUSD Employee	Program (GenEd or SDP-	Grade	Number of	E	jected Cla nrollment of students per	
_	Last Name, First Name	Number	(GenEd or SDP- Core)	Level(s)	Sections	GenEd	RSP	SDP

Principal Signature:	Date:	

For questions, please contact Secondary Mathematics Program, Division of Instruction at 213-241-6444.

## Intent to Offer Transition to College Mathematics and Statistics 2020-2021

Transition to College Mathematics and Statistics (TCMS) provides an alternative course pathway for high school students. TCMS is designed to ensure college readiness for students who complete Algebra 1, Geometry, and Algebra 2. Students who complete TCMS with a "C" or better will have a greater chance in being placed in college-level general education mathematics classes without additional support.

I understand the purpose of the TCMS. I, therefore, agree to provide the intended course as designed with appropriate support.

#### Principals should complete this form to indicate their intent to offer TCMS.

#### Please scan and email the completed form to: Patricia Heideman, Administrator of High School Instruction, Division of Instruction at pheidema@lausd.net

#### Deadline to Return Form: Friday, February 28, 2020

School Name	Location Code						
	Local District	NW	NE	<u>_</u> S _	_C	_E _	W
Principal Name	LAUSD Email					@lau	sd.net
AP SCS Name	LAUSD Email					@lau	sd.net
Math Coord. Name	LAUSD Email					@lau	sd.net

I recommend the following teacher to be trained for the course:

#### Transition to College Mathematics and Statistics: Roster-Carrying Teacher for 2020-2021

Assigned Math Teacher	LAUSD Employee	Program	Grade	Number of	E	ected Cla nrollment	
Last Name, First Name	Number	(GenEd or SDP- Core)	Level(s)	Sections	GenEd	RSP	SDP

Principal Signature: \_\_\_\_\_\_Date: \_\_\_\_\_

For questions, please contact Secondary Mathematics Program, Division of Instruction at 213-241-6444.

## Intent to Offer Financial Algebra 2020-2021

Financial Algebra 1 and Financial Algebra 2 provide an alternative course pathway for high school students. This course is intended for all students, including students with disabilities, who are interested in finance and business, and students in Linked Learning schools with a finance and business emphasis. The course will be suitable as another course option for students to complete their "c" math requirements for graduation.

I understand the purpose of the Financial Algebra 1AB or 2AB and agree to provide the intended course as designed with appropriate support.

### Principals should complete this form to indicate their intent to offer Financial Algebra 1 or Financial Algebra 2.

#### Please scan and email the completed form to: Patricia Heideman, Administrator of High School Instruction, Division of Instruction at pheidema@lausd.net

# School Name Location Code Image: Local District \_\_NW \_\_NE \_\_S \_\_C \_\_E \_\_W Principal Name LAUSD Email AP SCS Name LAUSD Email Math Coord. Name LAUSD Email

#### Deadline to Return Form: Friday, February 28, 2020

I recommend the following teacher(s) to be trained for the course:

#### Financial Algebra 1AB- Roster-Carrying Financial Algebra 1AB Teachers for 2020-2021

Assigned Math Teacher	LAUSD Employee	Program	Grade	Number of Sections	E	Projected Class Enrollment Estimate # of students per section				
Last Name, First Name	Number	(GenEd or SDP- Core)	Level(s)	Sections	GenEd	RSP	SDP			

#### Financial Algebra 2AB- Roster-Carrying Financial Algebra 2AB (Course 2) Teachers for 2020-2021

Assigned Math Teacher	LAUSD Employee	Program	Grade	Number     Projected Class       of     Estimate # of students per				
Last Name, First Name	Number	(GenEd or SDP- Core)	Level(s)	Sections	GenEd	RSP	SDP	

#### Principal Signature: \_\_\_\_\_

\_\_ Date: \_\_\_\_

Questions? Please call Secondary Mathematics Program, Division of Instruction at (213) 241-6444.