

## Fall Seminar 2018 at TCU

### AP Physics 1

#### **Course description:**

The content covered in this workshop will include the topics of motion, forces, energy, and momentum. Content topics will be discussed in the context of teaching students how to be effective writers in AP Physics, and also in the context of laboratory activities. Since training students to write for physics and executing effective lab activities remains a challenge for many AP Physics teachers, these two skills will be the main emphasis of this training.

#### **Instructor bio:**

John Frensey has been teaching all levels of AP Physics since 2006. He currently teaches at Prosper High School in Prosper, Texas. John is also an AP Reader for Physics 1 and has been for 3 years. John is also a member of the College Board's Instructional Design Team for AP Physics.

### AP World History

#### **Course description:**

Jonathan Henderson has over 20 years teaching experience spanning middle school, high school, and university classes. He studied history at the graduate level at Cambridge University, taught in Central Asia as a US State Department Fellow, and in 2007 was a Fulbright Scholar to China. He has been teaching AP World History since 2002 and been a reader for the exam since 2008. Jonathan is a member of the College Board's Curriculum and Instruction Team for the current AP World History exam redesign and helped author the College Board's AP Workshop Handbook for Summer Institutes. He is actively involved in the creation of assessment items for the AP World History national test and helped pilot the LEQ essays that will debut on the 2018 exam. Jonathan edited and wrote material for several of the major AP World History textbooks, coauthored *Fast Track to a Five: Preparing for the AP World History Examination*, and contributed to *The Sea in World History* published in 2017. In 2008 He served on a College Board committee in New York to review and edit the Curriculum Framework for the course rewrite. He teaches AP World History and Humanities at Forsyth Central High School near Atlanta and can be reached at [henderson678@yahoo.com](mailto:henderson678@yahoo.com)

#### **Instructor bio:**

This workshop is based on the philosophy that understanding the conceptual structure of the course and the interaction of its component parts is essential to creating effective lessons and assessments in the classroom. After briefly outlining the "architecture" of AP World History, we will consider proven lesson plans and how they serve as models for creating quality activities in the classroom. Teachers will leave with ready-to-go classroom materials, tech tools, curriculum guides, and assessment items as well as the informed ability to develop these on their own. A significant part of the week will be devoted to teaching the skills necessary for the writing component of the exam with special attention to recent changes in the rubric and essay prompts.

### AP Human Geography

#### **Course description:**

This AP Human Geography workshop will focus on application activities for students to use to master AP Human Geography concepts. This one day workshop will have a strong focus on classroom activities and lessons to get students using and applying geography knowledge. During the workshop, participants will actively participate in lessons they can replicate with their own students. Participants will be provided with ready to use, hands on activities they can use in their own classrooms immediately.

**Instructor bio:** Jennifer Garner has been teaching AP Human Geography at Forsyth Central High School in suburban Atlanta since 2004. She has served 14 years as an AP Exam Reader, the past four as a Table Leader. She has written exam items for the APHG Exam and practice test questions for the iScore5 APHG Exam review app. She is currently a member of the GACE Geography Test Committee. Mrs. Garner's experience in leading professional development is extensive including leading Georgia DOE Workshops in AP Human Geography each year since 2008, running workshops in writing skills based assessments and presenting on successful teaching strategies at the Forsyth County EdSummitt Summer Conference. Mrs. Garner is also active with the National Council for Geographic Education, presenting three times at their national conference and hosting multiple geography themed webinars. She is also a contributing writer for the National Geographic Education Blog. You can find her on Twitter, @jmgarner2003, where she co-moderates #worldgeochat and at [jmgarner2003@yahoo.com](mailto:jmgarner2003@yahoo.com)

## AP US History

### **Course description:**

APUSH Fall Seminar will be a course in which we review the expectations of the APUSH Exam, focus on setting up a successful APUSH program, and review the necessary skills for the APUSH course. Special focus will be on writing in the course, this is an area that both students and teachers struggle with and therefore it will be a major focus of this seminar. All aspects of the writing will be covered in the seminar: the SAQs, DBQs, and the LEQs. The primary objective of the course will be to address any follow-up questions or concerns that teachers may have had following any recent APSI trainings. Please bring the official College Board rubrics and Course and Exam Description, as this will be a major source of reference. Teachers are also encouraged to bring their textbook along with packing calendar.

### **Instructor bio:**

John P. Irish teaches AP U.S. History, American Studies AP, and Special Topics in Humanities called "People and Places in History" at Carroll Senior High School in Southlake, Texas. He is a nationally certified consultant in AP U.S. History for the Southwestern Region of the College Board and serves as a Question Leader for the AP U.S. History Exam. He is the co-Chair for the College Board AP U.S. History Test Development Committee (DC), which is the group responsible for creating the new exam, overseeing continuing changes to the curriculum, and developing / presenting trainings for teachers across the country at state and national venues. He was on the writing team that published a four volume updated edition of the AP U.S. History Workbooks by the Center for Learning, along with a curriculum unit on Edward Bellamy's novel "Looking Backward" also by the Center for Learning. He has published three books in the series on the Historical Thinking Skills for the redesigned AP History courses; these are published by Norton. He is the founder and chief editor for a small independent publishing company called A Bit O' Irish Press, which specializes in nineteenth-century American Gothic literature, Horror, Weird, and Science Fiction. The press has published a volume of Gothic Short Stories by Fitz-James O'Brien, three volumes of *The Collected Writings of O'Brien*, and anthologies on Mummy short stories. Mr. Irish holds a B.A. in Political Science and Philosophy, an M.A. in Philosophy (thesis topic: John Locke's Theory of Property), and a M.L.S. in Humanities (thesis topic: The Enlightened Puritan: the Intellectual Thought of John Adams) from Southern Methodist University. He is currently a Doctorate student in Humanities at SMU. The focus for his dissertation research is on early 19<sup>th</sup> century American thought, with special emphasis on Fitz-James O'Brien – the Irish Poe. He is a member of the American Historical Association, Society for History Education, and the Organization of American Historians.

## AP Biology

### **Course description:**

Participants in the seminar will reflect over the pacing and sequence currently being used in their AP course; identify the most challenging learning objectives and science practices to introduce to students and develop strategies to help students with understanding; focus on concepts in photosynthesis, cellular respiration, meiosis, quantitative analysis, cell communication...that students struggle with; share resources for labs, technology, and best teaching practices using modeling Please bring a calculator, the AP Biology Curriculum Framework, and laptop/electronic tablet, if possible.

### **Instructor bio:**

Nancy has taught AP Biology for 40 years. She currently mentors at Health Careers High School in San Antonio, Texas. As a College Board consultant for over 33 years, she has led many summer institutes in Texas, New Mexico, North Carolina, California, and Hawaii. She has had the honor of serving on the AP Biology Test Development Committee as well as being an AP Reader, Table Leader, and Question Leader at the AP Biology Readings. She has also served on numerous College Board Committees and Advisory Panels, the most recent being on the AP Biology Redesign Panel, The SAT Subject Area Test in Biology Test Development Committee, and AP Biology Innovations Professional Development Committee. Nancy has earned many awards and recognitions in teaching. Among these awards has been the Siemens Award Winner for Advanced Placement Teaching, Outstanding Biology Teacher from The National Biology Teachers Association, Northside Independent School District Teacher of the Year and Region XX Education Service Center of Texas Teacher of the Year, and Texas Exes Outstanding Teacher Award.

School Affiliation: Northside Health Careers High School  
4646 Hamilton Wolfe  
San Antonio, Texas 78229

## AP English Language and Composition

### **Course description:**

The course will work with the objective and written portions of the AP English Language test. The class will focus on navigating complex prompts, close reading strategies, generating evidence, and developing analysis in complex texts. Participants will deconstruct the prompts, develop the response and evaluate and score student samples from the AP reading. Special attention will be paid to the essay questions from the 2018 reading.

### **Instructor bio:**

Mary Jo Zell lives and teaches in Keller, TX. She received her B.A. from Villanova University, and her master's degree from Georgia Southwestern University. She began her teaching career in Pennsylvania and Georgia and is currently the department Chair of English at Keller High School, where she has taught for 18 years. She is in her 25th year teaching high school English, and has taught every level 9-12<sup>th</sup>. Presently, she teaches AP Language and AP Literature. For the past 15 years she has served as an AP Language Reader for the College Board; she is currently a Table Leader for the AP Language and Composition exam. She is an AP College Board Consultant and has conducted various workshops and summer institutes. Additionally, since 2010 she has worked with NMSI- conducting APSI's, leading mock readings, and training teachers.

# AP Music Theory

## **Course description:**

Welcome and introductions Review of agenda / materials for the day Solfege singing

### Introduction

- AP Exam format
- Brief overview of a year-long sequence of AP Music Theory at PWSH
- A typical class day at PWSH Music fundamentals as one continuous concept (Part A)
- Pitch
- Major scale
- “Major Scale Rapid Fire”
- Key Signatures. Beginning of the semester aural skills activities
- Solfege singing
- Call / response
- Learning songs by ear using solfege
- Early melodic dictation exercises Music fundamentals as one continuous concept (Part B)
- Rhythms (Simple Meter)
- Intervals
- Modes of the Major Scale
- Minor Scales / Minor Keys
- “Scale Inventory”

### Mid-semester aural skills activities

- Sight singing (simple meter, major / minor keys)
- Melodic dictation Music fundamentals as one continuous concept (Part C) • Rhythms (Compound Meter) • Triads • Seventh chords Late semester aural skills activities • Sight singing (simple / compound

meter, major / minor keys) • Melodic dictation • Two part dictation • Singing through chord progressions Music theory beyond fundamentals

- Harmonic analysis using Roman numerals
- Diatonic Chord Matrix
- Introduction to part writing Preview of the spring semester
- Cadences
- Non chord tones
- Secondary function chords
- Part writing from figured bass
- Melody harmonization
- Test prep Administering the AP exam in May
- Written portion
- Sight singing portion Loose ends and questions

**Instructor bio:**

Since the 2013-14 academic year, Akira Sato has held a rather unique position as a full time AP Music Theory teacher at Plano West Senior High School in Plano, Texas, where he teaches 6 sections of AP Music Theory classes. Prior to this appointment, he was a faculty member at the University of North Texas, where he taught courses in Jazz Arranging and Composition. Concurrently, he was the director of the Meadows Jazz Orchestra and taught courses in Jazz Improvisation and Jazz Pedagogy at Southern Methodist University in Dallas, Texas.

Akira has served as a reader for the AP Music Theory exam for the past four years with experience grading Sight Singing and Free Response Question 7 (Melodic Harmonization). He is a College Board Workshop Consultant and leads AP Summer Institutes during the summer months. He has also co-authored the *AP Instructor's Manual to The Musician's Guide to Theory and Analysis* published by W.W. Norton & Company. Akira earned a Master of Music Degree in Jazz Arranging from the University of North Texas, where he was a member of the One O'Clock Lab Band and had numerous compositions and arrangements recorded by the ensemble. He also holds a Bachelor of Commerce and Business Administration Degree from the University of British Columbia.

For more information, please visit [www.satojazz.com](http://www.satojazz.com).

## AP Environmental Science

**Course description:**

This course will include a mix of active labs and activities that teachers can take directly back to the classroom. Topics include water, energy, population, and toxicology. Water topics will include a tap-water mini-lab, an inquiry based oil spill lab, and water case-studies. Energy topics include an inquiry based solar lab and training on Socratic Seminar, a method to quickly and easily do whole-class discussions using any type of current

event or topic. Population will include a mark and recapture mini-lab, multiple quick population warm-up activities, and techniques for helping students with math calculations. Toxicology will include a simple and easy lettuce LD-50 lab and a student video project using the National Institutes for Health Toxicology database.

**Instructor bio:**

This school year will be my 10th year teaching AP Environmental Science (APES), and 17th year in the classroom. I earned my BS in Biology from the University of Texas, and I loved being a Longhorn so much that I went back to get my Master's degree in Science Education from UT as well. I have been an APES reader for 6 years, and have been doing APES teacher workshops for 4 years. I was also fortunate to present at the AP National Conference in California in 2016. I have been a participant in the Toyota International Teacher Program, Northrop Grumman Ecoclassroom Teacher program, and the Fullbright Teacher Exchange Program focused on Environmentally Sustainable Development in Japan. My goal is for teachers to leave my workshops with multiple classroom ready lab activities that can be done with minimal investment in expensive equipment.

## AP Literature

**Course description:**

AP Literature Seminar will include strategies, examples, and practice covering all facets of the AP Literature exam as well as supplemental materials, excerpts, and ideas to link with any novel, play, or poem. We will also share creative ideas to strengthen analysis and rhetoric by using film, art, music, and just taking a walk outside.

**Instructor bio:**

Scott Chalk – Westwood High School – TAG AP Language and Literature III/IV – 26<sup>th</sup> year teaching AP Reader, TCU alumni, scared of heights

## AP Chemistry

**Course description:**

This workshop will cover instructional strategies for AP Chemistry, focusing on typical first semester topics: atomic structure, molecular structure, titrations, chromatography, gas relationships, spectroscopy, and enthalpy. This session will focus on appropriate laboratory experiments, demonstrations, particulate representations, and methods for building student conceptual reasoning before layering mathematical reasoning overtop. Methods of improving mental math computations will be discussed. Participants will analyze past exam questions for common student misconceptions as well as methods for improving the quality of student free responses. If time permits, participants will work on writing their own assessment items to gauge conceptual understanding and align to the revised curriculum framework. Participants should come prepared to share best practices, collaborate with peers, and challenge their thinking. Participants are encouraged to bring a laptop or tablet, as online simulations and collaboration tools will be utilized.

**Instructor bio:**

Jamie Benigna has been a Chemistry teacher for 18 years and has taught AP Chemistry for 15 years. He currently teaches at the Roeper School in Birmingham, MI. He has a B.S. in Chemistry (Honors) and a Masters in Teaching from Wayne State University. Jamie was a former co-chair of the AP Chemistry Test Development Committee, served on the Curriculum Development and Assessment Committee, has been a reader for the AP Chemistry exam grading, and has written items for exams in the revised course. He has been a College Board Consultant for the past 6 years, and he has presented for the Flinn Scientific Foundation Summer Chemistry Workshops and eLearning series. He has presented at numerous conferences, including NSTA and the AP Annual Conference. He received the Teacher of Promise award from the Michigan Science Teachers Association in 2004 and the ACS Division of Chemical Education Central Region Award for Excellence in High School Teaching in 2017. Outside of teaching Chemistry, Jamie is a foodie and avid cook; he worked on recipe development and food styling for the *VizChef* app that is available for iOS.

## AP Calculus AB

### **Course description:**

In this session, we will dive into several important AP topics including derivative analysis, rate-in/rate-out problems, and functions defined by integrals. While these topics will provide context, we will discuss and explore ways to scaffold these topics to students of all levels while preparing them for the rigor of the AP Exam. Classroom ready resources will be shared that are engaging, rigorous and accessible to students. In addition to these resources, participants will have opportunities to create additional resources with guided instruction that target the skills needed for AP success. After leaving this session, participants will have new ideas on how to teach difficult topics, how to scaffold material for students of all levels and have new ways to engage students in authentic practice through quality resources.

### **Instructor bio:**

Bryan Passwater taught AP Calculus AB and BC at Lebanon High School, in Lebanon, IN for 7 years before joining the AP-TIP IN program at the University of Notre Dame in 2012. Acting as the Director of Mathematics and CS for the AP-TIP IN program, Bryan trained, mentored and supported over 1000 AP and Pre-AP teachers around the country. Bryan has led dozens of 1-day, 2-day and weeklong AP workshops from San Francisco to New York City and has been an AP reader since 2013. He is passionate about teaching AP calculus and is highly motivated to provide great trainings, support, resources and encouragement to AP Calculus teachers everywhere. In 2017, Bryan decided to go back to the classroom full time and currently teaches AP Calculus AB, AP Calculus BC, Multi-variable Calculus, Differential Equations and Honors Algebra II at a low-income rural school in Indiana. Bryan has recently been named to College Board's newly developed AP Calculus Instructional Design Committee committed to providing the support that AP Calculus teachers need to build and grow a successful AP Calculus classroom. Additionally, he has co-authored the AP Calculus curriculum for the KIPP foundation schools across the country and written AP Calculus resources for Propel, Applied Practice, the College Board and The National Math and Science Initiative. Bryan lives in Carmel, IN with his wife Mary, an elementary school teacher, and their two kids, Adeline (16) and Aydin (14)

## AP Statistics

### **Course description:**

The goal of this seminar is to prepare teachers to teach AP Statistics through specific pedagogical techniques, so their students can be successful in AP Statistics. In the seminar we will explore content-specific strategies, including scaffolding and activities, that you can use in your classroom to enhance the learning of various statistical topics. These specific topics include: **Regression, Probability, (including random variables), and Simulation of Sampling Distributions.** You will be provided with activities that will help collect data that can be used in the illustration of these topics. In addition to these specific topics, participants will discuss issues related to the AP Statistics Exam including; the use of technology on the exam, the scoring of the exam, and use of exam FRQ and multiple-choice questions within the course.

### **Instructor bio:**

Lance Belin has been a Mathematics teacher in the state of Texas for over 27 years. He currently teaches AP Statistics at JJ Pearce High School in the Richardson ISD, and additionally, teaches college mathematics at Collin College in Frisco, TX. Lance has taught AP Statistics since its inception in 1996 and has developed the AP program for the Richardson ISD. In 2010 he was awarded Region 10 Texas Teacher of the Year for all north Texas secondary schools. He received his Bachelor's degree at the State University of New York in Mathematics and his Master's degree in Statistics from the University of Texas at Dallas. For the past 17 years, he has worked with the College Board as an Exam Reader, Table Leader, Rubric Team member, and as a Consultant. For the past six years Lance has worked as a consultant for National Math and Science Institute (NMSI) to write curriculum and present several one-day, two-day, and week-long summer institutes for AP Statistics for numerous school districts around the country.

## Pre-AP MS English

### **Course description:**

**Title:** *Creating Critical Thinkers, Readers, and Writers, from Middle School to Collegiate Coursework*

**Brief Description:** Using examples from a variety of genres and formats (comics, political cartoons, print and video advertising, and other "traditional" non-fiction & literary examples), participants will discuss, practice, and apply the various skills of critical thinking, reading comprehension and analysis, and systemic writing improvement for students.

**Detailed Synopsis:** Reading informational texts and being able to independently analyze information is an essential skill for success in this digital age. But how do we encourage in-depth reading and engagement with a text in an era of digital distractions? Part 1 of this session will focus on strategies to help students understand complex ideas and retain knowledge. Participants will also examine methods for holding quality discussions that can emerge from thoughtful inquiry.

Writing instruction takes time and effort in both teacher planning and student performance, and the difficulty that students have with just putting coherent ideas on paper can be a deterrent to even getting started. In Part 2, we will focus on ideas to make frequent writing enjoyable and bring about successful systematic improvement without burning out the students or the teacher. Intended topics include literary analysis, rhetorical basics, and teaching textual evidence with student commentary.

**Instructional Methods:** Lecture with multi-media, Numerous reading excerpts, Small Group Discussion, Individual Work

**Assessment Method(s):** Application, Reflection, Instructional Debriefing

### **Instructor bio:**

Brook Bullock has taught in Oklahoma since 1994 and currently teaches at Edmond Memorial High School in Edmond, Oklahoma. His first teaching assignment was at rural Blackwell High School where he was a founding member of the school's first AP English Vertical Team, and he taught both on level and Pre-AP English I and II, as well as electives in mythology and Shakespeare. From 2001 until 2011, he taught at Del City High School where, in addition to starting the AP English Language program, Mr. Bullock was the Yearbook and Newspaper sponsor and taught Journalism and English III, and from 2011 to 2017 he taught AP English Language and on-level American Literature at Putnam City North High School.

Brook is a Reader for the AP English Language and Composition Exam, has scored entries for National Board Certification, and has been a College Board consultant since 1997. He has presented at numerous workshops, conferences, and Summer Institutes in the Southwest, Midwestern, Southern, and Western Regions of the College Board, including multiple invitations to present at the College Board's AP National Conference. His passion, however, continues to be working with students.

## Pre-AP HS English

### **Course description:**

Teachers will practice strategies and techniques to promote critical thinking, critical reading, and critical writing with an eye toward the skills needed in AP and college-level courses.

Topics will include the following:

Thematically linked poetry, nonfiction, and fiction

Strategies for analysis of those texts

Writing prompts from the analysis/topics of the texts

Strategies for writing to the prompts

What participants should bring:

Pens or pencils

Highlighters

Laptops are permitted but not required

**Instructor bio:**

Ann Jackson teaches high school and middle school English at Home Run Ministries in Kingwood, TX. She taught all levels of English for 33 years in Texas and Louisiana public schools; she also served as department chair and vertical team leader in Crosby, TX. An endorsed College Board consultant for over 20 years in one- and two-day workshops and summer institutes, Ms. Jackson has also written workshop material for the College Board and serves as a mentor to new consultants. She was twice recognized as Crosby High School's Teacher of the Year and is a recipient of the Goldin Foundation Excellence in Education Award. Ms. Jackson received both her Bachelor's degree in English Education and Master's degree in Supervision and Administration from Louisiana State University in Baton Rouge.

## Pre-AP MS and HS Math: Algebra Focus

**Course description:**

Functions for All: A look at linear, quadratic, cubic, exponential, logarithmic, trigonometric, and piecewise functions. Functions will be represented in graphical, tabular, verbal, and algebraic forms. We will evaluate, transform, and compose functions. AP type problems will be adapted to use in each of our classrooms. Activities will include circuit trainings, scavenger hunts, mazes, card match games, and gallery walks. These activities can be used in any Algebra 1, Algebra 2, and Pre-Calculus classroom. Be sure and bring your calculators.

**Instructor bio:**

Dickie Thomasson graduated from the University of Arkansas at Monticello with a BSE in mathematics and a minor in English. He received his MSE in Secondary Education with an emphasis on mathematics from the University of Arkansas and an Administrator's Certificate from the University of Central Arkansas. Dickie has taught mathematics for 41 years in grades 6 through college in public schools in Arkansas. He is currently teaching Algebra 1, Pre-Calculus, and AP Calculus at Prairie Grove High School. Mr. Thomasson has been active in the Arkansas Council of Teachers of Mathematics having served as membership chairperson, treasurer, and president. Dickie was the recipient of the Presidential Award for Excellence in Mathematics and Science Teaching in 2001. He is a College Board endorsed consultant and presents at one-day and two-day conferences as well as conducting summer institutes. Dickie is a Reader for the AP Calculus exam. He presents workshop sessions at the local, state, and international levels. Mr. Thomasson was an original participant and trainer for the Arkansas Math Crusades, a Laying the Foundation trainer, and was recently named a Pre-AP National Faculty trainer.

## Pre-AP MS and HS Math: Geometry focus

**Course description:**

Geometry Focus: Middle and High School Teachers

This workshop will engage geometry teachers in cutting edge mathematical explorations and lessons so that they can take these experiences and tailor them for use with their own students.

The day will include the following:

- Multi-representational approaches to teaching geometry
- Connecting geometric proof with "Justifying an Answer," and "Explaining Reasoning"
- Transformations in geometry that lead to transformations of the graphs of functions in algebra courses
- Reinforcing geometric topics through introducing the unit circle.
- Dynamic geometry that employs the following: discovery mathematics, creative thinking, problem solving, and classroom efficiency

- Experiential learning and project examples in the geometry classroom

Participants should bring a device that can access the web for exploration of pre-made geometry activities built with Desmos Activity Builder. Participants will be given day-access to a TCU wireless network. A tablet (or even a phone) would suffice provided the user can see the screen clearly. If any explanation is needed concerning devices, feel free to e-mail the instructor, Melissa Burkhead (maburkhead@aol.com.)

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#### **Instructor bio:**

Melissa Burkhead teaches geometry, precalculus and BC Calculus at Trinity Valley School in Fort Worth, Texas. She has been teaching secondary students for 26 years, including in Mexico City, the El Paso public schools, Austin's magnet school program and the Episcopal school system. Ms. Burkhead has presented at numerous AP conferences and most recently represented The College Board with a special AP Calculus focus in both Abu Dhabi, U.A.E. and Bogotá, Colombia. She is also a reader for the AP Calculus exam. She has contributed to the proceedings of the International Conference on Technology in Collegiate Mathematics with articles titled "Linkages, Ellipses, and Elliptical Exercise Machines: Student Explorations," and "Transforming Teacher Technology Use: Results from Summer Institute Training." She holds a BA in mathematics and political science from Georgetown College and an MA in education (mathematics specialty) from The University of Texas at El Paso.

## Aligning Pre-Calculus Instruction to Improve Learning in Calculus AB and BC

#### **Course description:**

PreCalculus: Vertical Alignment to AP Calculus AB/BC

This workshop offers teachers the opportunity to work collaboratively on quality instructional materials that help strengthen student knowledge and skills in a PreCalculus course leading to AP Calculus AB/BC or equivalent college level Calculus I/II courses. Participants will engage in classroom activities that enhance teamwork, discussion and conceptual understanding. A variety of formative assessments will be modeled throughout the workshop.

Special focus will include the following:

- Analyzing behavior of functions all year long (multiple representations, continuity, composition, end behavior, inverse, transformations, a new parent function, piecewise functions, slopes of non-linear functions, tangent lines, etc.).
- Analyzing polynomial functions in the context of particle motion.
- Rational functions- analyzing discontinuities, end behavior and vertical asymptotes.
- Building the unit circle and remembering the information it contains using several tricks.
- The graphs of trigonometric functions- laying the groundwork for polar curve sketching.
- Polar curves- creating polar graphs using Cartesian graphs as a tool.
- Infinite series- convergence/divergence with a special focus on geometric series.
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#### **Instructor bio:**

Tugce (T.J.) Onen teaches AP Calculus AB, AP Calculus BC and PreAP Pre Calculus at Birdville High School-BISD, in North Richland Hills, TX. She holds a M.S. degree in Chemical Engineering from Bosphorus University, Istanbul-Turkey. After working ten years as a process engineer at Cimtek-Cement Technology Inc. in Ankara-Turkey, she moved to Texas in 1999, decided to make a change in her career and got certified to teach 8<sup>th</sup>-12<sup>th</sup> chemistry, physics and mathematics. She has been teaching AP Cal AB/BC and PreAP PreCal at Birdville HS since 2001. She worked as an adjunct instructor for Texas Wesleyan University, Fort Worth, TX from 2001-2010 for teaching dual-enrollment Calculus I course. Mrs. Onen has also been working as a calculus consultant for the National Math and Science Initiative (NMSI) for the past eight years. She presents at APSIs, teaches two-

day fall and spring teacher trainings, presents at student prep sessions, mentors teachers, designs curriculum material and creates AP style questions for NMSI. She recently presented at College Board's APAC in Houston, TX in July 2018.

## Pre-AP Social Studies

### **Course Description:**

Pre-AP Social Studies:

Teachers will discuss AP skill building and participate in activities that encourage analytical and critical thinking for many levels. Topics discussed will include: thinking globally, map skills, thesis writing, document analysis, using supporting evidence, and more. Participants are encouraged to bring a laptop and have access to Google Drive.

### **Instructor Bio:**

Kelly Scoggins teaches AP Human Geography, AP Psychology, AP Macroeconomics, and Pre-AP Geography at Mabank High School. She received BS from Texas A&M University and her Master's in Education for SMU. She has presented at conferences such as the AP Annual Conference, Know Your Impact, and Learning at Lovejoy. She is the Pre-AP Geography team leader at Mabank High School. She serves on the curriculum writing committee for social studies focusing on alignment and AP skill building in the curriculum for grades 6-12.

## Pre-AP MS Science

### **Course description:**

This course will focus on skills to prepare middle school students for high school science classes. Content material will be centered on explaining six different laboratory activities that the class will conduct and analyzed. A major focus of the analysis of the laboratory investigations will be the use of different types of graphs and the different types of data. Content reading and writing skills will also be covered.

### **Instructor bio:**

Todd Abronowitz currently teaches all levels of chemistry at Parish Episcopal School in Dallas. Previously, he was the lead AP Chemistry teacher for Dallas ISD. Prior to this, he taught at John Paul II High School in Plano (and served as science department chair) for five years. He has also taught at Creekview High School, in the Carrollton-Farmers Branch ISD for 8 years, South Garland High School (Garland ISD) for six years. He has served as the lead chemistry teacher at Creekview High School. Since starting his teaching career in 1990, he has taught regulars chemistry, honors chemistry, Pre-AP Chemistry and Advanced Placement Chemistry. He has started three AP chemistry programs, at South Garland HS, Creekview HS, and most recently at John Paul II HS. He is involved with several professional organizations: Science Teachers Association of Texas (STAT), Associated Chemistry Teachers of Texas (ACT2), and the American Chemical Society. He has presented workshops at several STAT Conferences for the Advancement of Science Teaching and Southwest Regional Meeting of the American Chemical Society. He has presented at two-day conferences and one-day conferences for the College Board and been the presenter for APSI in Texas and Arkansas. He served as a State Chemistry Textbook Review member for Texas in 2001. He was co-founder of a Traveling Science Show that performed shows across the DFW Metroplex. He wrote his own laboratory manual and study materials for use in his AP chemistry class. Mr. Abronowitz has received numerous awards including NMSI All-American Teacher of the Year 2012, Shultz Award for outstanding high school chemistry teacher from the DFW section of the ACS, Radio Shack National Teacher Award, Associated Chemistry Teachers of Texas Teacher of the Year in 2000, and Wal-Mart Teacher of the Year 1996.

## Elementary Education ELA (K – 2)

### **Course description:**

Come join us for “Differentiated Center Make and Takes” where you will leave with new center ideas that can be modified from week to week with little effort. You will create examples in the class to use right away. Blackline masters will be provided and emailed to participants for you to customize to your needs. You will create a “Stretch a Center” journal that students can use in any center for enrichment. Also part of the session we will look at fluency challenges in regards to how to score accurately for a reading grade according to Texas standards. Grades one and two will see how to translate a fluency score into an accurate grade that consistently adjusts from grading cycle to grading cycle. You will also get help in how to communicate the system to parents and use in collection of data. It takes all of the guesswork out of grading fluency and gives you tools to communicate to parents the “why” and “how” a student arrives at a grade; providing them with the yearlong goal early in the year.

**Instructor bio:**

Beth Hull is a second grade literacy teacher at Benbrook Elementary. Having taught for FWISD 15 years she has taught kindergarten, first, and second grades. She is certified in ESL and GT. Prior to teaching in the classroom, she was a reading specialist who worked with grades 3-5 in small groups on a title one campus. Beth loves teaching little people and strives to make learning rich and inviting for all learners. She has presented in various district PD’s and has mentored many student teachers. Her strengths are in differentiated centers and small group guided reading. She believes that the best professional development experiences come from opportunities to make and create so that best practices are easy and ready to implement the first day an attending teacher returns to the classroom

**Elementary Education ELA (3-5)**

**Course description:** Math and ELAR 3 – 5

In this course we will explore the math concepts by Reporting Category and offer engaging high participation activities into lesson ideas to teach concepts in each category, while focusing mostly on numeracy skills and algebraic reasoning. In ELAR we will explore reading and thinking strategies to help all readers achieve gains. We will explore best practices including guided reading and literature circles, setting goals and giving feedback, and identifying success criteria for your students. Time will be provided for you to work within your grade level to design lessons using the information gained today. Special attention will also be given to instructing reading in non-fiction text. This class is designed for 3 – 5 Math and ELAR teachers.

**Instructor bio:**

Joanne Campbell is an elementary teacher who has worked in a variety of roles in K – 5. She currently works as an RTI Coordinator and Intervention Specialist in grades K -5 at the Academy at Nola Dunn, a brain based choice school in Burleson, Texas. Her passion is literacy with emphasizing creating lifelong readers who become lifelong learners. She has three children, who all attend(ed) Fort Worth ISD public schools and lives in Fort Worth with her youngest, her husband, and their dog, Baxter.

**Elementary Education Math (3-5)**

**Course description:** Math and ELAR 3 – 5

In this course we will explore the math concepts by Reporting Category and offer engaging high participation activities into lesson ideas to teach concepts in each category, while focusing mostly on numeracy skills and algebraic reasoning. In ELAR we will explore reading and thinking strategies to help all readers achieve gains. We will explore best practices including guided reading and literature circles, setting goals and giving feedback, and identifying success criteria for your students. Time will be provided for you to work within your grade level to design lessons using the information gained today. Special attention will also be given to instructing reading in non-fiction text. This class is designed for 3 – 5 Math and ELAR teachers.

**Instructor bio:**

Shaula Shaffer currently serves as a Dyslexia Specialist for Burleson ISD. She has previously taught Pre-K through Second grade for over ten years. Throughout her teaching career at the elementary level, she has presented at numerous school and district professional development seminars. Mrs. Shaffer’s experiences have

proved valuable in being selected as a Lead Teacher, Mentor Teacher, and Cooperating Teacher throughout campus and other select opportunities. She was instrumental in the redesign of district math scope and sequence and most notably in being hand selected for the District Committee to develop resources and tools for teachers. Her expertise is Guided Reading/Early Literacy and Guided Math/Numeracy.

Mrs. Shaffer is often recognized for her many accomplishments and contributions, with the most recent accolades as being named as 2018 Top Teachers in Fort Worth Magazine and as the 2017 Teacher of the Year for her campus. She holds a Bachelors Degree in Social Sciences and a Masters Degree in Education with an emphasis on Curriculum and Instruction. She is incredibly passionate about her work and is always excited to share her experience, knowledge, and expertise to help peers grow in their career.