THE CUNY
HSE Curriculum Framework
PREPARATION FOR COLLEGE & CAREERS

The City University of New York • The CUNY Adult Literacy/HSE Program
Developed and Written by Members of the HSE Professional Development Team of the CUNY Adult Literacy/HSE Program

The City University of New York
The CUNY HSE Curriculum Framework
2015

Principal Authors
Kate Brandt  Social Studies: Integrating Reading and Writing Curriculum Framework
Rebecca Leece  Science: Matter and Energy Curriculum Framework
Mark Trushkowsky  Math: Problem Solving in Functions and Algebra Curriculum Framework
Eric Appleton  Math and Science: Contributing Author and Curriculum Framework Production Coordinator

Associate Author
Tyler Holzer, Math: Problem Solving in Functions and Algebra Curriculum Framework

Special Acknowledgement
Steve Hinds, for his visionary contributions to CUNY HSE math instruction

Significant Contributions
Erna Golden, Shirley Miller

Acknowledgements
Ellen Baxt, Gary Dine, Armitta McKinley, Joan Stern, Ramon Tercero, Kevin Winkler

Project Director: Leslee Oppenheim

Design and Layout: Renée Skuba | Graphic Design
Video Production: Kieran O’Hare, Zachary Timm

The authors would like to thank their students in the Spring 2015 CUNY HSE Demonstration Class who inspired their teaching and writing.

Sabrina Abreu  Fabio Castro  Edith Leon
Adam Alicea  Iquis Dickerson  Lashana Linton
Janet Alicea  Sandra Eisenberg  Angel Osorio
Netea Banks  Julien Fils  Roxanne Perez
Eileen Berrios  Renee Gulliver  Miyako Smith
Asbury Brown  Brad Lee  Natasha Williams
Tiffany Carrian  Ron Lee

For information about the CUNY Adult Literacy/HSE Program—its services, educational curricula and instructional materials, or to inquire about training options, please contact CUNY’s HSE Professional Development Team at:
http://literacy.cuny.edu

This project was made possible through WIA Incentive Grant funding from the U.S. Department of Labor, with support from the New York State Department of Labor, Division of Employment and Workforce Solutions, in collaboration with the New York State Education Department, Office of Adult Career and Continuing Education Services.

This work is licensed under a Creative Commons Attribution 4.0 International License.
This workforce solution was funded by a grant awarded by the U.S. Department of Labor. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, expressed or implied, with respect to such information, including any information or its completeness, timeliness, usefulness, adequacy, continued availability or ownership. CUNY is an equal opportunity employer/program and auxiliary aids and services are available upon request to individuals with disabilities.
Contents

Introduction
Letter from the Project Director
Welcoming Teachers to The CUNY HSE Curriculum Framework

Social Studies:
Integrating Reading & Writing
Overview
Curriculum Map
Unit Descriptions
Lesson Plans
Resources

Science:
Matter & Energy
Overview
Curriculum Map
Unit Descriptions
Lesson Plans
Science/Math Connections
Resources

Math:
Problem-Solving in Functions & Algebra
Overview
Curriculum Map
Unit Descriptions
Units
Teacher Reflection
Resources
Classroom Supports and Career Pathway Connections

Overview
Icebreakers and Interactive Activities
Adaptations: Teaching Lower-Level ELA/Social Studies Learners
Adaptations: Teaching a Mixed-Level Math Class
Youth Considerations
From Classroom to Careers
College Is Worth It!
Resources: Websites for Career Exploration

Professional Development Recommendations

Suggested Professional Development Activities
   For Social Studies
   For Mathematics
   For Science
Online Resources for Professional Development
Dear Colleagues,

I am delighted to share this CUNY HSE Curriculum Framework with you. It was conceived and written by a gifted team of instructional experts in HSE teaching, curriculum development and professional development: Kate Brandt, Rebecca Leece, Mark Trushkowsky, and Eric Appleton, who also served as the project's Production Coordinator. As teachers themselves, they have a deep understanding of how to help adult students learn and how to encourage other teachers to push their already strong skills to the next level. As curriculum developers, they have the capacity to capture the essential core of an academic area and convey how to teach it in ways that are engaging, accessible and respectful of students and teachers.

I would also like to acknowledge the invaluable contributions to this Curriculum Framework by Tyler Holzer, Shirley Miller, and Erna Golden. There were many others whose efforts contributed to bringing this project to its current form, and their names are listed on the credits page.

This HSE Curriculum Framework rests on CUNY's decades-long experience in preparing students for the HSE exam. Our instructional philosophy of integrating basic skills instruction with content learning, building general background knowledge in science and social studies, and providing innovative, interactive math instruction has been foundational to the development of this curriculum project.

We hope that this document will serve as a helpful tool in the important work that you do to prepare students for success on the HSE exam. In concert with the larger HSE teaching community, we understand that achievement of a high school equivalency diploma is a basic educational threshold leading to higher education or training and more secure employment, that provides a greater chance for equality of opportunity for our students.

We thank the New York State Department of Labor and the New York State Education Department for their leadership and for this opportunity to develop the CUNY HSE Curriculum Framework.

With best wishes,

Leslee Oppenheim
As teachers in adult literacy and high school equivalency (HSE) education, our work has always been demanding and challenging. But now that the HSE test has been revised to reflect new, more difficult Common Core standards, the demands on teachers are even greater. Teaching students to read, write and do math at the HSE level is no longer enough. We also need to make sure students have specific content knowledge in traditional school subjects, as well as the capacity to apply this content knowledge to analysis and problem solving. We are committed to developing students’ capacity to achieve a high school equivalency credential, knowing that it opens the doors to further education and training, and work.

How can our instructional practice respond to these increased demands? We know that there is no “one size fits all” approach to effective instruction.

HSE program types and instructional models vary greatly. Some are large, homogenously-grouped programs with a math teaching specialist and another teacher for the remaining subjects. Some programs are able to offer a separate science class, taught by a science specialist. In many programs, however, classes are taught by one talented, hardworking generalist who teaches all five HSE subject areas to a mixed-level class. There are also differences in intensity of instruction: part time/full time; in modes of instruction: individual tutoring/classroom groups; and in venues of instruction—youth residences/the workplace/correctional facilities, and every combination of the above. The CUNY HSE Framework has been developed with flexibility in mind, so that teachers can adapt and supplement it to meet the needs of their students and specific teaching environments.

The CUNY HSE Curriculum Framework was written to provide direction and structure for the teaching of the new HSE exam in the areas of math, science and social studies, with integrated reading, writing, analytical, and problem-solving skills instruction. We have outlined an instructional guide in each of these three areas via curriculum maps, descriptions of topic units and illustrative lesson plans.
Included throughout are suggested on-line and print teaching resources, and links to short videos of aspects of the lesson plans taught in a live classroom. The two concluding sections present interactive icebreaker activities and address modifications for lower level learners, youth populations, and college and career planning that integrates research, decision making and graph interpretation.

The number of units and activities that can be taught will depend on the level of the students, the number of hours a week the class meets and the length of the instructional cycle. For those programs that are able to offer enough hours, students at the high school equivalency level will gain a solid understanding of the high utility content and skill areas examined on the TASC. You will see that the CUNY Curriculum Framework prioritizes depth over breadth and does not address all of the content that might potentially be included on an HSE exam. The Framework focuses in math on functions and algebra, in social studies on U.S. history (with extensions to civics, economics and geography), and in science on matter and energy. The curriculum illustrates how basic skills can be strengthened while HSE content is being learned.

Our hope is that teachers will select relevant aspects of the Curriculum Framework and make them their own. Teaching is a creative act and each teacher will make different decisions about what and how to teach, and which instructional resources best suit their needs.

A final word from the CUNY HSE Professional Development Team:

We teachers all work in our individual classrooms in isolation within our own four walls. We can often feel disconnected from other educators doing similar work in the classroom next door, in a program in the same city or in another part of the state. The CUNY HSE Framework can serve as an instructional resource in common, and it is our hope that teachers across the state will build and improve upon the Framework and then share what they have created. Whether via the web or face-to-face meetings about instructional practice, there are now more ways than ever to collaborate and learn from each other. We hope this Framework can serve as an impetus for teachers across the state to build networks and partnerships through common vocabulary and teaching experiences, helping us to grow together as a field.

Eric Appleton, Kate Brandt, Rebecca Leece, and Mark Trushkowsky

The CUNY HSE Curriculum Framework was developed during the Spring of 2015. The work builds on a series of SED-sponsored professional development Institutes for HSE teachers statewide in 2014-15.