HONORS ENGLISH

Global Urban Literature

Course Description:

Lab Atlanta's Honors English samples literary sources from around the globe, emphasizing place-based literature and the literature of cities (featuring Atlanta), in particular. Core themes of the Global Urban Literature curriculum include: the development of human identity; how "senses of place" inform the cultures that emerge from them; and how people understand and interact with "others" across various lines of human difference.

As with all Lab Atlanta curricula, this course is designed for students to take increasing responsibility for and ownership of their learning. Using the principles and pedagogy of the Loose Canon network, learners will be responsible in the latter parts of the semester for selecting their own readings (in consultation with and pending faculty approval) from selected reading options across various genres and contexts.

Global Urban Literature will explore how cultures of origin and one's sense of place affect and inform one's identity and worldview. It will also provide learners ample opportunities to practice and improve their reading, writing, dialogue and observational skills. Given how often the Hero's Journey archetype influences narrative structures and content, this course will also examine how this common ("monomyth") archetype functions across widely diverse texts.

Course Objectives:

Students will:

- Explore how literary sources respond to and influence the places--especially cities--in which they were written
- Consider how literature can help readers build empathy by seeing through the eyes of other perspectives or cultures
- Learn how--and why--stories are so effective in moving people and inspiring action
- Investigate the multiple--even sometimes conflicting--elements of human identity
- Reflect on how their own identity influences their perspective and worldview
- Examine how their sense of "home" (or culture of origin) shapes who they are
- Explicate which aspects inform their own voice and sense of self, and how they can deploy that identity most effectively in their reading and writing

Learning Experiences (**Key Themes and Units of Study**)**:**

- Acute Observation" exercise: Reflecting on both internal & external experiences
- Daily class discussion of readings, writing, and other shared experiences with their Lab Atlanta classmates
- Autobiographical/Narrative story-telling: both improvisational (oral) and recursive (written)
- Author interviews about composing a memoir and/or their writing process
- Reflection on prior Autobiography/Story of Self drafts from the perspective of "an Other"
- Close reading and explication of poetry, prose, and other texts

Writing Assignments (Each of these writing assignments will entail producing multiple drafts, with revisions, comprising a variety of writing styles: from expository to creative.):

- Autobiographical narrative (or essay)
- Responsive journal (ongoing): to foster personal reflection and enhance students' self-awareness of their own interpretive lenses

Writing Assignments (continued):
- Creative-writing assignments (e.g. "I Am/I Am From…" poem--or "Song of Myself," short story, etc.)
- Literary interpretive essays (thesis-based expository essays using literary analysis, with textual support)
- Poetry analysis essay

Collaborative class discussions and other small-group assignments will complement these more individual reading and writing tasks, and attest to the quality and extent of each student's active engagement with the course material, teacher, and other classmates.

Instructional Resources:
Literary Sources will include complete works and selected excerpts from texts such as:

- Poetry and Lyrics by a wide variety of artists
- Alfred Uhry's *Driving Miss Daisy* (1988: Pulitzer Prize winner)
- Hannah Palmer's *Flight Path*
- John Stilgoe's *Outside Lies Magic*
- Sandra Cisneros's *A House of My Own*
- Ryan Gravel's *Where We Want to Live*
- Mark Beaver's *Suburban Gospel*
- Julia Alvarez's *In the Time of the Butterflies*
- Faiza Guene's *Kiffe Kiffe Tomorrow*
- Teju Cole's *Open City*
- Free Choice Selection I: a novel or memoir with an international theme or focus
- Free Choice Selection II: a collection of poetry, verse, song lyrics, etc.
- Dina Nayeri's *Refuge*
- Jacqueline Woodson's *Another Brooklyn*

Collateral Sources: including:
https://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story
https://www.ted.com/talks/taiye_selasi_don_t_ask_where_i_m_from_ask_where_i_m_a_local

Assessment:
The depth and quality of students' engagement with course material and their progress as learners will be among the most important assessment criteria in this class. Student engagement and language arts skill development will be demonstrated by:
- Generative, productive participation in class discussions of course material;
- Empathetic listening and understanding multiple perspectives through dialogue;
- Sophisticated, close reading of a range of complex texts;
- Creative thinking in synthesizing concepts;
- Critical thinking in conceiving and articulating incisive analyses;
- Clear expression in speaking and writing;
- Progress in self-assessment and metacognitive awareness (reflecting on group and individual processes, e.g.).

Some of the assignments in Honors English will be assessed individually; others will entail collaborative assessments for coursework produced in small groups.

Grading:
There will be both objective and subjective elements to determining course grades in Global Urban Literature. Most of the objective assessment will be done according to explicit rubrics. The subjective assessments will generally entail more qualitative aspects and standards. Evidence of progress and growth in terms of knowledge- and skill-development over the semester is especially important, so grades toward the end of the semester will carry more weight than those earned at the beginning. Were these 3 primary domains to be formally quantified, they would reflect percentages consistent with their relative importance in the course:
- 20%: Active engagement with course material (demonstrated by class participation, prompt completion of homework assignments, constructive peer assessment, etc.)
- 60%: Academic performance (especially--but not limited to--expository essays and other written coursework):
- 20%: Accurate peer- and self-assessment of scholarly and personal strengths and growing edges as a student (i.e. metacognitive reflection, etc.)

Curricular Alignment:
This course corresponds to Georgia Department of Education (DOE) course numbers 23.06207 (Tenth Grade Literature and Composition) or 23.06307 (World Literature and Composition).

GLOBAL URBAN HISTORY

Course Description:
This course is organized around overarching themes that serve as unifying threads which will help students relate to the "big picture" of history. In this course, we will explore the patterns of world history in order to provide you with a better understanding of our human past and the larger impact of the world today. First, we explore the origins of the urban civilization and examine how societal, cultural, and political innovations helped forge the first cities. Secondly, we examine how humans used ingenuity and innovation to create empires, dynasties and mega-cities. Students will discover how culture, ethnicity, class, and religion have shaped ancient, classical, medieval, renaissance, and colonial cities. In addition to examining global cities, this course examines Atlanta in a parallel timeline to reveal the similarities between other global cities and Atlanta. The immersive learning experience of this course will also assist students in developing systems thinking.

Course Design:
The study of History is a sophisticated quest for meaning about the past, beyond the effort to collect and memorize basic factual information. This course will continue to deal with the facts – names, chronology, events, and the like – but it will also emphasize historical analysis. Students will examine a variety of geographic locations and time periods. In order to accomplish this lofty goal, students will use four different historical thinking skills. These skills are:

- Creating historical arguments from historical evidence
- Conducting historical research
- Comparison and contextualization
- Historical interpretation and synthesis

Course Expectations:
Workload:
Throughout the course, you are expected to spend approximately 3-4 hours per week outside of the class working on the following activities:

1. Interactive lessons that include a mixture of class dialogues and immersive fieldwork;
2. A rigorous amount of reading and self reflection; and
3. Assignments in which you apply knowledge and skills developed in class and extend these concepts to the real world.

Academic:

1. Students should observe the following rules of decorum regarding class participation and academic preparedness:
2. Students should review the course syllabus regularly. Google Classroom will provide the most up to date assignments, readings, etc.
3. Class participation is mandatory and an essential part of this course. Students are expected to attend each class and come prepared--ready to discuss course readings. Students should bring course materials to each class (notebooks, binders, and writing utensils). If a student misses a class, he or she should consult the syllabus and/or classmates for material covered in class. When absent, it is the student's responsibility to find out what was missed.
4. Students should check labatl email and review the Lab Atlanta calendar for schedule changes daily.
5. Class lectures and fieldwork provide additional information and details related to our larger class discussion. Therefore students should take notes. The instructor will provide a demonstration on how to take notes during the first week of class.
6. Students are expected to attend each class and participate actively in classroom discussions. Active participation will be described as:
    a. Making regular contributions to class conversations and integrating concepts and ideas from course readings;
    b. The ability to articulate a thought or idea in a respectful manner;
    c. Answering questions posed by the instructor. Phrases such as "I don't know" or "I do not have an opinion" will not be acceptable answers.

Course Expectations (Academic) (continued):

7. Class begins promptly at the time indicated on the schedule. When students arrive late, they miss important instructions and cause a disturbance for the rest of the class. Tardiness will result in a loss of participation points, as per the core policy.
8. Homework deadlines and quiz dates are important; if an absence causes a student to need additional time, this should be arranged with the teacher before class begins or during advisory. All homework assignments should be submitted by 8:30 am the morning that they are due, unless stated otherwise. Five (5) points will be deducted for every day that an assignment is turned in late.
9. If approved, late/missed homework or quizzes MUST be completed within one week of the original due date!
10. Ask for help if you need it. I maintain an open door policy and am willing to help you understand the class material.

Student/Teacher Interactions:

1. Instructors will communicate assignments on a regular basis via Google Classroom and email. When reaching out to teachers via email, please use proper etiquette and grammatical rules. This etiquette includes allowing one full school day for a response.
2. We encourage open, honest and respectful dialogue between students and instructors. It is the student's responsibility to be her own self-advocate and address the teacher with any questions/concerns about the course and/or grades.
3. Please be mindful of instructional times when speaking with a teacher. Attempt to minimize class disruptions.
4. When coming for extra help, please be prepared to communicate with the teacher in regards to what you need help with and how you think the teacher can help you. Please bring all necessary materials with you to the extra help session.

Technology:

1. Electronic communications devices –cell phones, calculators, ipods etc. – are not permitted in the classroom unless the professor authorizes their usage for a class-related purpose.
2. The use of technologies for audio and video recording of lectures and other classroom activities is allowed only with the express permission of the instructor.

Course Assessment:

Weight: Performance Area

- 10% : Progress and growth in terms of knowledge- and skill-development over the semester
- 30% : Active engagement with course material (demonstrated by class participation, prompt completion of homework assignments, etc.
- 60% : Academic performance (especially--but not limited to--expository essays and other written coursework)

Grading Scale:

A+ = 97-100
A = 93-96
A- = 90-92
B+ = 87-89
B = 83-86
B- = 80-82
C+ = 77-79
C = 73-76
C- = 70-72
F = 69 or Below

Progress and Growth:
Progress and growth describes the intellectual growth that occurred over the course of the semester.

Active Engagement:
Engagement will be defined as how one participates in class discussions and activities, which is necessary to build your understanding of the material. Active participation in this course attests to each student's mastery of content, and provides a space for students to exhibit their analytical skills through classroom discussions. Students should attend class prepared to engage fully; this means bringing your laptop or book and writing tools to each and every class.

Academic Performance:
Students are tested on concepts, terms, units and historical topics covered in class. Course assessments may take the form of quizzes, oral exams, unit tests, mini projects or presentations. There will be be five (5) unannounced quizzes to ensure you stay current with the course contents. Your lowest quiz grade will be dropped in the calculation of your final course grade at the end of the semester.

Reflection Papers:
During the semester, students will write four 2-page persuasive papers. These short reflection papers will help students unpack ideas and concepts developed in this course, and provide a measurement of their grasp of the subject matter. In addition, students are required to take field notes which document our work outside of the classroom.

Using Place-Based Literature to Critique the City :
Students will select one fiction or nonfiction book that incorporates the city of Atlanta as a major theme or venue. Students will then complete the following assignment:
1. Create a multimedia presentation which articulates how Atlanta is described in the selected book and;
2. Develop a 2-3 page essay that analyzes the city through the personal experiences of the student.

Multimedia Analysis:
Students will critically examine 1-2 themes, concepts or ideas raised in a film, documentary or video. The purpose of this analysis is not to summarize a film, documentary, or musical content. Instead, students will use media as texts to identify themes connected to our analysis of the city . Films to be announced.

Curricular Alignment:
This course corresponds to Georgia Department of Education (DOE) course number 45.08307 (Honors World History).

Of Note:
The instructor reserves the right to make changes to the syllabus as needed.

VISUAL AND MEDIA ARTS

Digital Photography and Videography

Course Description:
Lab Atlanta's Visual and Media Arts course explores the range of creative expression through the lenses of digital photography and videography, in particular. In a one-semester course, students will learn the basics of DSLR photography, videography and video editing using Canon DSLR cameras and Adobe Premiere Pro software, both industry standards. We will incorporate drone images, dolly sliders, as well as time-lapse and slow-motion videography. In both documentary films and photo essays, we will document Lab Atlanta's group field work as well as each student's individual dialogues with the city. Additionally, students will learn and apply principles of graphic and web design in order to share their creative works with a global audience.

Course Objectives:
- Master the technical basics of photography (aperture, shutter speed, ISO, exposure, focal length, depth of field, lighting), videography (frame rates, basic audio capture, etc.)
- Gain familiarity with photo and video editing software and sharing tools
- Gain familiarity with emerging photographic hardware and software
- Explore role of photography and video in current and emerging media landscapes
- Gain hands-on experience evaluating and working with new and emerging photo and video tools
- Cultivate students' facility with artistic elements and the principles of design expressed through Medium.com's web-design platform
- Reflect on the characteristics of their own and others' artwork (via self, peer and artistic critiques)
- Discuss and critically assess works of art
- Connect artistic expression to other disciplines and life experiences

Learning Experiences:
The Digital Photography and Videography course includes both art appreciation and art making. Students will have ample opportunities to create and self-reflect through art critiques on their own work and pieces made by peers and working contemporary artists. Students will grow familiar with the concepts, issues, practical applications, and knowledge of art and the artistic process through interactions with practicing artists. Through the questioning, uncovering, art making, and feedback processes, students will better comprehend how works of art reflect their understanding of Atlanta and themselves.

Instructional Resources:
This course will achieve its objectives by blending an analytical and practical approach to making art, in collaboration with Atlanta-based art institutions and visiting professional artists. Lab Atlanta will provide digital cameras to all students. Lab Atlanta computers will be equipped with the necessary digital editing and composition software to support students' work.

Assessment:
The Visual and Media Arts assessments are performance based: students will maintain a portfolio to document their creative process and reflections. The portfolio will also reflect each student's evolution and growth in art-making, art critique, and understanding contemporary artists' works. Students' digital portfolios, narratives, and final art piece will be assessed by collaborating professional artists, as well as by Lab Atlanta faculty.

Grading Rubric:
- Active engagement with course material (demonstrated by class participation, prompt completion of homework assignments, constructive peer assessment, etc.): 20%
- Creative portfolio: 70%
- 2 Documentary Films: 20%
- 4 Photo Essays: 20%
- Student's Choice: 20%
- Exhibit Piece + Artist Statement: 10%
- Weekly Social Media Post(s): 10%

Curricular alignment:
50.002217 Media Art Comprehensive II - Expands concepts taught in Media Arts I by creatively exploring diverse purposes and audiences. Individuals investigate various techniques using multiple platforms, such as animation, broadcast, film, graphic design/illustration, photography, and web design. Media Arts II, expands digital media knowledge by designing a wider variety of media arts products and productions.

MATHEMATICS

Course Description:
The Mathematics course has two components:

- The personalized online component provides the differentiated mathematics content required for each student, at any level.
- The applications component ensures that students collect, apply, and interpret real-world data in a meaningful way.

The mathematics applications component of the course is organized around quantifying the world through collecting data, mathematical modeling, and interpreting the results of mathematical models. Learners will then apply these concepts to understand better, to communicate better, and to better predict significant trends within the city of Atlanta.

Course Objectives:
Students will:

- Observe, measure, and synthesize real-world data
- Mathematically model real-world data
- Predict trends using mathematical models
- Apply concepts in context, to promote quicker recall and longer retention of topics
- Apply, organize, and present conjectures based upon quantifiable data that students have measured and observed

Learning Experiences:
The applications course component will enhance the online learning experience. Students will quantify patterns and behaviors from Lab Atlanta site visits in the field. For instance, learners might study the flow of people entering and exiting a MARTA train at a particular time of day. Learners might also study the cost-benefit of growing vegetables using traditional methods versus using aquaponics. This immersive component is designed to complement students' understanding of the standards and benchmarks for each learner's specific target mathematics course (online).

Instructional Resources:
Online component: The curricular resources originate from our online math provider, The Virtual High School.
Application component: We will also use Kahn Academy curricular units, Desmos as a free online mathematical modeling software, Google Documents as a data analysis software package, and Google Sketchup.

Assessment:
Supplementing the online course's assessments, larger school-wide projects will provide opportunities for learners to exhibit mastery in applying topics relating to or extending from their target math course. Formative assessments measuring mastery of skills and standards will be reflected in specific rubrics for each project. In addition to the project rubrics, learners will write reflections to articulate their understanding of the application and a mathematical modeling exercise. The (Virtual High School) online course will provide a summative assessment of each learner's understanding of core content.

- 15% Daily Work: daily work consists of logging into the VHS platform each day for at least 45 minutes, journal reflections, homework assignments, and posts in the VHS platform.
- 25% Quizzes: quizzes will be given intermittently during the semester usually at the end of a weekly lesson.
- 40% Tests: tests will be given at the end of a major unit
- 20% Final Exam/Applications: a final exam will be given at the end of the semester to Assess cumulative understanding of the topics covered. In addition to the final Exam, data analysis, and statistical modeling will be evaluated integrated in other courses.

Classroom Behavior:
It is understood that you will comply by the Lab Atlanta student handbook for general behavior. Specifically in the classroom, I expect you to be On time, Prepared, and Respectful.

Also:
1. The graphing calculator is a powerful tool that makes it possible for students to analyze functions and sets of data and to complete complex computations. However, running programs and retrieving stored information when such actions contradict guidelines for assignments or assessments is a clear violation of the Honor Code. Any questions regarding appropriate use of a graphing calculator should be directed to individual teachers.
2. Absences and the make-up work that ensues sometimes create scheduling problems.
    a. Missed assignments and assessments may be made up only in case of illness or other excused absence and must be done so in a timely manner. Students must see teachers on the day of their return to school to determine a make-up schedule.
    b. Any student who misses a math class but who is present for some portion of that school day must contact his or her math teacher on that day to make arrangements for the make-up of any assignments or assessments. The student should expect to take any assessment that day. Failure to do so may result in an academic penalty.
3. Tardies to class will be recorded.
4. All students are expected to maintain and routinely check their Lab Atlanta email account and each class's web page.
5. Students should keep cell phones and pagers turned off and in bookbags.

Curricular Alignment:
The Georgia Department of Education (DOE) course number for this course will correspond to the personalized mathematics selection and level for each individual Lab Atlanta student.

Students enrolled for the Spring 2017 Semester, for instance, will be taking Math courses including:
- GSE Algebra II 27.09927
- GSE Honors Geometry 27.09917
- GSE Accelerated Geometry B/Algebra II 27.09957
- Accelerated GSE Analytic Geometry B/Advanced Algebra 27.09767
- Accelerated GPS Pre-Calculus 27.09607
- Calculus 27.07800

WORLD LANGUAGE AND CULTURES

Course Description:
The World Language and Cultures course has two primary components:

- Students complete online modules in the target language in order to master appropriate skills, as defined by their sending school or school system.
- Students also engage in the transdisciplinary study of global themes that are not language-specific, in order to gain an understanding of Atlanta as a global city. Depending on the student's skill level and interest, interactions with native speakers can also be arranged in order to give students more immersive experience with fluent dialogue in the target language.

The overarching theme of the course is organized around the exploration of cultural identity and its components: the origins, qualities, beliefs, and means of expressions of a group. Through connections with international communities in Atlanta, students may also find opportunities for immersion and engagement in the target language in order to explore the concept of cultural identity. Students can take this course for any language, at any level of proficiency.

Course Objectives:
Students will:

- Develop their linguistic proficiency in the target language with the online module
- Grow in their understanding of cultural perspectives, practices, and products in the target language; and uncover connections and comparisons between international communities in Atlanta and their own culture through the transdisciplinary global component

Learning Experiences:
Through field work (empathy interviews, observations of behavior), reading and listening resources, discussion and reflection, students will explore the following themes of study:

- Cultural life and expressions
- Beliefs and values
- Challenges: immigration, transportation, housing, food

Instructional Resources:

- Mángo Languages K-12
- Other online or interactive resources in the target language

Assessments:

- Listening and reading comprehension quizzes
- Dialogue and oral quizzes
- Preparing and conducting interviews or conversations with native speakers
- Formal Formative and Summative assessments

Curricular Alignment:
The Georgia Department of Education (DOE) course number for this course will correspond to the personalized language selection and level for each individual Lab Atlanta student.

Lab Atlanta students enrolled for the Spring and Fall 2017 Semesters, for instance, have taken Language courses including:

- French I 60.01107, French II 60.01207, French III Honors 60.01307, French IV Honors 60.01407, and AP French: Language and Culture 60.01707
- Spanish I 60.07107, Spanish II 60.07207, Spanish III Honors 60.07307, and Spanish IV Honors 60.07407
- German I 61.01107
- Mandarin Chinese I 62.01107

SOCIOLOGY

As an introduction to sociology, this elective course examines how societies function as systems, how institutions are organized, and how our personal choices are influenced by both. Students will have multiple opportunities in this course to hypothesize and problem-solve using a sociological lens. Through their research and fieldwork, students will interpret issues from the past in order to inform their prospects for building for a vibrant, sustainable future for themselves and the city of Atlanta. The immersive learning experience of this elective will also assist students in developing systems thinking.

Course Design

1. The Sociological Imagination
2. Research Methods and Theory
3. People, Processes and Institutions
4. Social Stratification and Social Inequality

Course Objectives

Through this course, students will:

- Develop a deep understanding of sociological concepts and theories
- Develop skills and knowledge needed to become engaged citizens, well informed about their local environment and society at large
- Develop an intermediate understanding of urban ethnographic research methods
- Develop some familiarity with research methods related to the study of cities
- Develop a transdisciplinary approach in conducting sociological research

To participate optimally in the Lab Atlanta experience, all students should play an active role in the course. Students should come to class prepared to articulate through verbal or nonverbal communication that they have a deep understanding of the material. These public discourse performances could take the form of small group conversations, written reflections, or oral exams. Lastly, as an elective course, students will develop a project that articulates some component of sociology.

Course Expectations

Workload:

Throughout the course, you are expected to spend approximately 3-4 hours per week outside of the class working on the following activities:

1. Interactive lessons that include a mixture of class dialogues and immersive fieldwork;
2. A rigorous amount of reading and self reflection;
3. Assignments in which you apply knowledge and skills developed in class and extend these concepts to the real world.

Academic:

Students should observe the following rules of decorum regarding class participation and academic preparedness:

1. Students should review the course syllabus regularly. Google Classroom will provide the most up to date assignments, readings, etc.
2. Class participation is mandatory and an essential part of this course. Students are expected to attend each class and come prepared--ready to discuss course readings. Students should bring course materials to each class (notebooks, binders, and writing utensils). If a student misses a class, he or she should consult the syllabus and/or classmates for material covered in class. When absent, it is the student's responsibility to find out what was missed.
3. Students should check labatl email and review the Lab Atlanta calendar for schedule changes daily.
4. Class lectures and fieldwork provide additional information and details related to our larger class discussion. Therefore students should take notes. The instructor will provide a demonstration on how to take notes during the first week of class.
5. Students are expected to attend each class and participate actively in classroom discussions. Active

participation will be described as:

a. Making regular contributions to class conversations and integrating concepts and ideas from course readings;
b. The ability to articulate a thought or idea in a respectful manner;
c. Answering questions posed by the instructor. Phrases such as "I don't know" or "I do not have an opinion" will not be acceptable answers.

6. Class begins promptly at the time indicated on the schedule. When students arrive late, they miss important instructions and cause a disturbance for the rest of the class. Tardiness will result in a loss of participation points, as per the core policy.
7. Homework deadlines and quiz dates are important; if an absence causes a student to need additional time, this should be arranged with the teacher before class begins or during advisory. All homework assignments should be submitted by 8:30 am the morning that they are due, unless stated otherwise. Five (5) points will be deducted for every day that an assignment is turned in late.
8. If approved, late/missed homework or quizzes MUST be completed within one week of the original due date!
9. Ask for help if you need it. I maintain an open door policy and am willing to help you understand the class material.

Student/Teacher Interactions

1. Instructors will communicate assignments on a regular basis via Google Classroom and email. When reaching out to teachers via email, please use proper etiquette and grammatical rules. This etiquette includes allowing one full school day for a response.
2. We encourage open, honest and respectful dialogue between students and instructors. It is the student's responsibility to be her own self-advocate and address the teacher with any questions/concerns about the course and/or grades.
3. Please be mindful of instructional times when speaking with a teacher. Attempt to minimize class disruptions.
4. When coming for extra help, please be prepared to communicate with the teacher in regards to what you need help with and how you think the teacher can help you. Please bring all necessary materials with you to the extra help session.

Technology

1. Electronic communications devices –cell phones, calculators, ipods etc. – are not permitted in the classroom unless the professor authorizes their usage for a class-related purpose.
2. The use of technologies for audio and video recording of lectures and other classroom activities is allowed only with the express permission of the instructor.

Course Assessment:

Weight: Performance Area

- 20% : Progress and growth in terms of knowledge- and skill-development over the semester
- 30% : Active engagement with course material (demonstrated by class participation, prompt completion of homework assignments, etc.
- 50% : Academic performance (especially--but not limited to--expository essays and other written coursework)

Grading Scale:

A+ = 97-100	C+ = 77-79
A = 93-96	C = 73-76
A- = 90-92	C- = 70-72
B+ = 87-89	F = 69 or Below
B = 83-86	
B- = 80-82	

Progress and Growth
Progress and growth describes the intellectual growth that occurred over the course of the semester.

Active Engagement
Engagement will be defined as how one participates in class discussions and activities, which is necessary to build your understanding of the material. A student's engagement will be tracked over the course of the semester so that students and their parents will be able to draw connections between the level of participation and overall performance in the class. Students should attend class prepared to engage fully; this means bringing your laptop or book and writing tools to each and every class.

Academic Performance
Students are tested on concepts, terms, units and historical topics covered in class. Course assessments may take the form of quizzes, oral exams, unit tests, mini projects or presentations. There will be be five (5) unannounced quizzes to ensure you stay current with the course contents. Your lowest quiz grade will be dropped in the calculation of your final course grade at the end of the semester.

Course Requirements and Learning Experiences
Course Readings
This course will use the Socratic method to discuss concepts, theories and concepts related to the field of Sociology. Since this is a small course, all students are expected to keep up with course readings and to make contributions to class conversations. In addition, we will complete the following:

Fieldnotes and Fieldwork
Sociologists frequently use ethnographies, participant observation, archives and landscape studies to evaluate the everyday interactions of people, institutions, and organizations. Students will develop a critical understanding of various sociological and qualitative research methods. Therefore, students will learn a variety of research methods related to the the discipline of sociology. Beginning in Week Three, students will keep a notebook of all field work exercises. The instructor will review these notes sporadically. Over the course of the semester, students will participate in 5 exercises that involve various research methods. We will also use Medium as a writing platform to provide students with intellectual space to share their work with the instructor.

Book Review/Media Analysis
Students will read a recently published, book-length ethnographic study chosen by the instructor. After reading the book, students will write a critical reflection that evaluates the chosen methods, fieldwork and sociological theory presented in the book. This is not a book report, but a critical writing assignment that will provide students the opportunity to relay how they interpret the concepts. In addition, students will use some form of media to create a similar ethnographic report.

Persuasive Papers
During the semester, students will write four 2-page persuasive papers. These short reflection papers will help students unpack ideas and concepts developed in this course, and provide a measurement of their grasp of the subject matter. In addition, students are required to take field notes which document our work outside of the classroom.

Oral Exam
The instructor will test students knowledge of the subject using oral exams and discussion questions.

Curricular Alignment
This course corresponds to Georgia Department of Education (DOE) course number 45.03107 (Sociology).

ENGINEERING APPLICATIONS

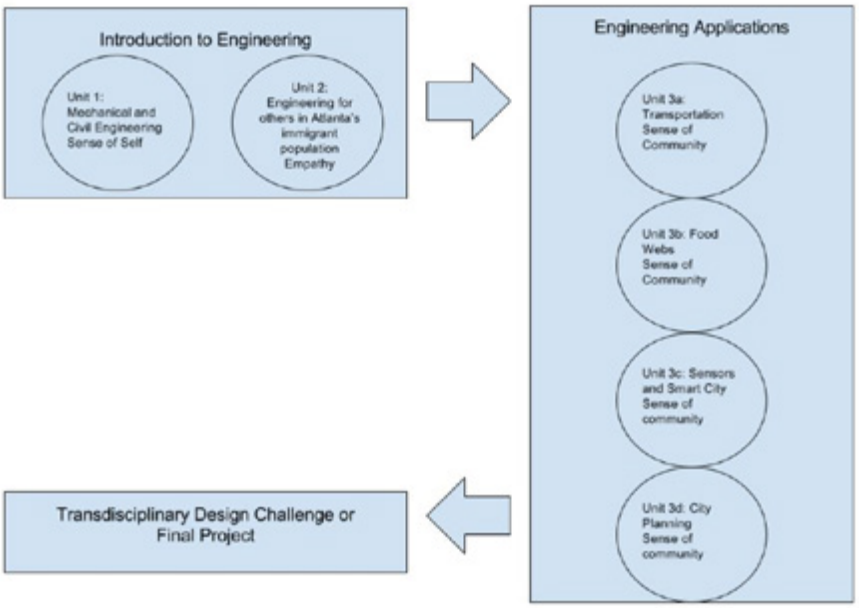
Course Description:
As an introduction to engineering applications, this elective course immerses students in salient issues concerning themselves and the City of Atlanta. From this immersion, learners will begin to articulate needs of selected users and design multiple prototypes to serve these identified needs. Students will be introduced to principles of engineering, explore various engineering fields, and apply these practical concepts within a specific field of engineering. Students will bring a human-centered lens to their work as they apply the design thinking process alongside the engineering design process. They will learn to define problems better, explore and evaluate possible solutions, and promote and advocate for change.

Course Objectives:
Students will:

- Develop empathy for users of potential engineered solutions
- Learn to see the connections between science, technology, fine arts, engineering and math, and how their principles apply to public design
- Exhibit mastery of Georgia Department of Education standards: STEM-EA-4 thru STEM-EA-11
- Identify and explore various engineering fields and their applications
- Apply skills learned to re-designing existing systems

Learning Experiences:
The course is scaffolded so that learners develop the ability to identify and address a need in an area of their particular engineering interest. In units one and two, students will develop their sense of self and be introduced to the basic principles of engineering, building key skills like 3D-CAD modeling, engineering graphics, and different drawing perspectives. In addition to those skills, developing empathy towards the user will be emphasized to facilitate effective, innovative, and creative design.

After completing the introduction to engineering module, students will be given choices to investigate issues in four topics relating to the city of Atlanta: food, transportation, smart cities technology, and city planning. In conjunction with key partners, learners will be paired with mentors and specialists in these fields to articulate a salient issue and develop a prototype to test. This final prototype will be evaluated by faculty, mentors, and community members.



Instructional Resources:
Instructional Textbook:
Irwin's Engineering the Future: Science, Technology, and the Design Process, (Key Curriculum Press, 2008)

Physical and Consulting Resources:
Lovett Makerspace and Tech Theater Workshop, Georgia Institute of Technology Public Design Workshop, GA Tech School of Applied Physiology, and Project Lead the Way.

Assessment:
Each student's final grade will be determined using a combination of digital portfolios (blog posts, reflections, 2D/3D and CAD models), and individual/group presentations. To the extent that they apply in the context of the course, the GA DOE standards will be mapped to these elements in order to assess student mastery of relevant standards and skills for Engineering Applications (ENGR - EA).

Summative Engineering Applications Assessment:
Elements of the final transdisciplinary design challenge will serve as the summative assessment for the engineering applications course, featuring the skills and knowledge students learn during the semester. Since each transdisciplinary design challenge project will be student-initiated, we cannot know in advance what projects the students will undertake.

- 30%: digital portfolios (blog posts, homework assignments, plan drawings, reflections, 2D/3D and CAD models)
- 50%: individual group presentations, products
- 20%: Final Project

Classroom Behavior:
It is understood that you will comply with the Lab Atlanta student handbook for general behavior. Specifically in the classroom, I expect you to be On time, Prepared, and Respectful.

Also:

1. The graphing calculator is a powerful tool that makes it possible for students to analyze functions and sets of data and to complete complex computations. However, running programs and retrieving stored information when such actions contradict guidelines for assignments or assessments is a clear violation of the Honor Code. Any questions regarding appropriate use of a graphing calculator should be directed to individual teachers.
2. Absences and the make-up work that ensues sometimes create scheduling problems.
    a. Missed assignments and assessments may be made up only in case of illness or other excused absence, and must be done so in a timely manner. Students must see teachers on the day of their return to school to determine a make-up schedule.
    b. Any student who misses an Engineering class but who is present for some portion of that school day must contact his or her Engineering teacher on that day to make arrangements for the make-up of any assignments or assessments. The student should expect to take any assessment that day. Failure to do so may result in an academic penalty.
3. Tardies to class will be recorded.
4. All students are expected to maintain and routinely check their Lab Atlanta email account and each class's web page.
5. Students should keep cell phones and pagers turned off and in bookbags.

Curricular Alignment:
This course corresponds to Georgia Department of Education (DOE) course number 21.47207 (Engineering Applications (ENGR - EA)).

DESIGN THINKING AND INNOVATION

Transdisciplinary Capstone

Context:
In addition to the six disciplines, which provide the strong curricular foundation of our honors-level academic experience, we have designed the whole Lab Atlanta experience along a transdisciplinary arc--a Hero's Journey--with the challenges of the city of Atlanta as the opportunity and trajectory for individual and collective student growth and development.

This transdisciplinary arc of Lab Atlanta will follow the design cycle, beginning with and continuously grounded in ongoing research (informed by the disciplines studied) to build empathy and understanding for the city and its people. As this understanding grows, students will begin to work with specific users (people--either individuals or groups) and identify their needs. Students will conclude their semester by completing a capstone design challenge.

Course Description:
As an arc throughout Lab Atlanta, the design thinking curriculum will provide students with a real world, experiential and practical approach to collaboration, empathetic need-finding, and creative problem solving. Design thinking has its roots in product design, but has been applied to everything from new company products and solutions to community challenges to healthcare experiences to K-12 school challenges and everything in between. Students will learn design thinking as a process, as well as apply those skills against real world challenges.

The course will culminate in a capstone project to demonstrate mastery of the design process. The capstone during the Fall Semester 2017 will be related to the Atlanta Smart Cities and Digital Infrastructure initiative and what that means for citizens.

Course Elements:
Design Thinking will be immersed throughout the Lab Atlanta experience in four ways:

- **Foundations:** Students will participate in scaffolded challenges and skill building classes to learn the process, activities, and mindsets of Design Thinking, including Empathy, Define, Ideate, Prototype, Test, and Storytelling
- **Empathy Building in Community:** Starting from the beginning of the program, students will gain empathy for the Atlanta community and build a foundation of knowledge about the challenges faced. Students will document their findings and identify challenges they might wish to pursue individually while at LAB and as part of a team of designers after they leave LAB.
- **Capstone Challenge:** Students will work together as a collaborative team(s) to address an identified need in the Atlanta community. Students will employ the Design Thinking process to identify the need and then work through the entire process to determine a potential solution. Their prototype will be tested (hopefully a number of times) and a final presentation made to the public.
- **Integrated:** As a cross disciplinary topic, Design Thinking will also be integrated into other aspects of the Lab Atlanta curriculum, highlighting consistency in language and how the aspects of design thinking can help in anything from English to Visual Arts to Sociology to Engineering

Course Objectives:
In an experiential and real world way, this course will "show not tell" the following:

- Design Thinking, including what it is, how it has had impact, and how it can be applied
- kills and experiences in Empathy, Define, Ideate, Prototype, and Test
- Collaboration and Team, especially the value of a diverse team in getting to the right question and the right answer
- Storytelling, highlighting its value as well as experience in doing it to communicate real users and their challenges

Learning Experiences:

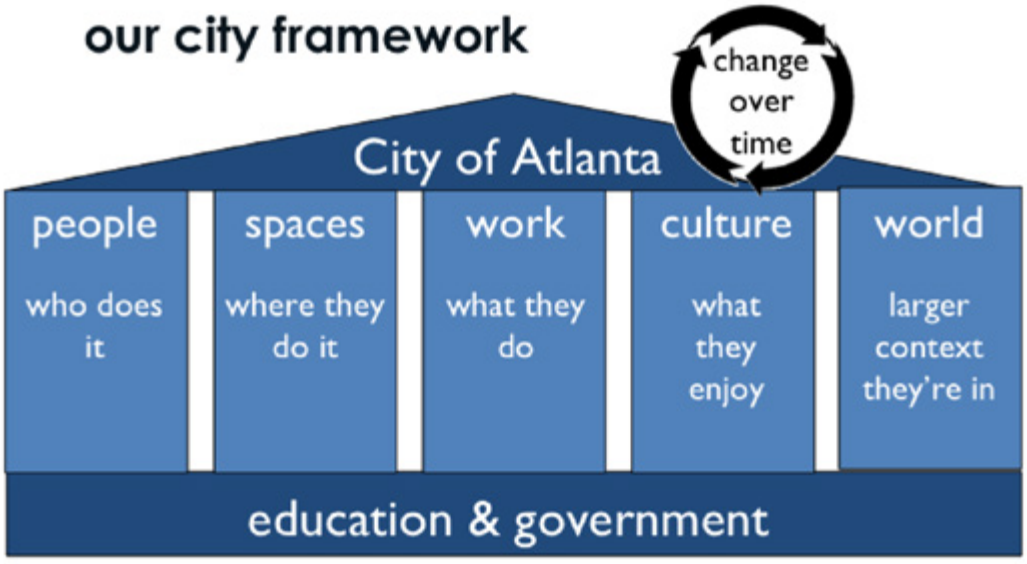
- Experiences throughout will be largely experiential, with a focus on real world stories to illustrate key points, as well as activities and exercises where students don't just "hear it", they actually "do it"
- Experiences will be highly collaborative as students learn how to be most effective on teams, how their personal style fits, and the value of a diverse team.

Assessment:

Performance in this course will be assessed through a combination of written participation, reflections, conversations, and presentations, along with ongoing feedback to the students, ensuring they understand the concepts and can apply it in the real world

Understanding the City of:

A critical part of the course will be gaining empathy and understanding the city of Atlanta from many different dimensions, as students better understand the canvas of a city to both inspire them and to help them determine issue areas that interest them. Throughout LAB, and especially outside of design thinking class, students will gain empathy in Atlanta across the following dimensions:



- **People** (**Who does it**)**:** Various people, groups, ethnicities, visitors, communities, and other organizations of people
- **Spaces** (**Where they do it**)**:** Landscapes, buildings, neighborhoods, parks, roads, and other physical anchors
- **Work** (**What they do**)**:** Jobs, industries, careers, and focuses of what people do
- **Culture** (**What they enjoy**)**:** Arts, entertainment, sports, food, music, and activities
- **World** (**Larger context they're in**)**:** Impact of world outside city, including elections, politics, current events, movements, and threats
- **Change over time:** Ever changing city, with different periods of history across people, spaces, work, culture, and world