# The 2014 Arkansas Governor's School Curriculum

Students attending AGS are selected on the basis of their abilities and interests in a particular intellectual discipline or field known as Special Aptitude Development (Area I).

In keeping with the School's aim of developing competencies in the use of theory to understand, manage, and integrate knowledge, each student also pursues classroom work and reading in two other areas: General Conceptual Development (Area II) and Personal and Social Development (Area III). The curricula in Area II and Area III are identical for all students.

Area I: Arts Choral Music Bill Higgins Rachel Schrag Instrumental Music Tom McDonald, Conductor Stefan Cwik Rick Dimond Gerry Gibson Kevin Sanders	Fred Boosey, Coordinator	<b>Drama</b> April Gentry-Sutterfield Candrice Jones <b>Visual Arts</b> Kimberly Kwee Jason McCann
Area I: Academic English/ Language Arts John Andrews Wesley Beal Allen Frost Jessica Pitchford Social Science Rapheal Lewis Kondwani Phwandaphwanda Jim Ross Peggy Scranton	Stacy Key, Coordinator	Natural Science Stephen Borutta Elijah Carter Dwight Daugherty Timothy Trawick Mathematics Stacy Key Lars Seme Josh Ulrey

Area II: General Conceptual Development Sarah Baver Revis Edmonds Alan Elrod Tara Flanagan Jim Rush Phillip Spivey Ray Wheeler	Mark Elrod, Coordinator
Area III: Personal and Social Development Fred Boosey Debbie Hibbs	Phillip Melton, Coordinator
Elizabeth Martin Spencer Sutterfield Kelly Taylor Chad Terrell Jody Webb	

# **AREA I: ARTS**

#### DRAMA

#### **April Gentry-Sutterfield and Candrice Jones**

The 2014 Arkansas Governor's School Drama students will explore several foundational components of contemporary performance, examine the role of performance within society, and develop their own artistic voices as story-tellers and performers. The students should be prepared to engage themselves intellectually, artistically, physically, and collaboratively while they refine skills like focus, leadership, team work, commitment, and communication.

## **CHORAL MUSIC**

## **Bill Higgins and Rachel Schrag**

AGS Chorale is a class specializing in the rehearsal and performance of modern choral music. Though generally a performance-oriented class, general musical studies will be presented alongside the rehearsal of modern repertoire. The class will include a discussion of current musical trends, basic studies in theory and score analysis, and issues regarding language and poetry. The overall objective is development and appreciation of choral singing as an artistic expression.

#### **INSTRUMENTAL MUSIC**

#### Tom McDonald, Gerry Gibson, Rick Dimond, Kevin Sanders, and Stefan Cwik

The AGS 2014 students in Instrumental Music will be involved in rehearsing and performing works of prominent 20th and 21st century composers. Emphasis is placed on music from this period, styles of composing, and circumstances surrounding the birth of these styles. Issues such as color, texture, melody, harmony, rhythm, and meter will be addressed in reference to each style and work. Excellence in performance is something that individuals and groups always strive for; however; it is the process of learning music and understanding the creative process of composing music in a specific 20th or 21st century style that is of prime importance in our performing ensemble. This knowledge and expertise will allow students to share with students in other Area 1 disciplines. The discussions and lectures in Perspectives feature faculty and student presentations, discussions, theory styles, and listening sessions which deal with significant music and musical trends. The combination of ensemble performance and Perspectives classes at AGS is aimed at opening the students' minds to the incredibly vast world of music, both to its composers and its styles.

#### **VISUAL ARTS**

#### Jason McCann and Kimberly Kwee

The focus of the Visual Arts program at AGS is to develop student artwork in terms of concept and content. Students will be encouraged to explore the process behind their artistic product in a variety of techniques and materials guided by instruction and critique of art and theory through the ages. The hope is that students will acquire an understanding of how working artists achieve consistency and continuity in a large body of work.

#### **AREA I: ACADEMICS**

#### **ENGLISH/LANGUAGE ARTS**

#### Introduction to Cultural Studies – Wesley Beal

What is culture? The term is vexing, often described as among the hardest words to define in the English language. There are several possible approaches to this subject, ranging from anthropology's study of customs and practices to sociology's reliance on statistics, but for the purposes of this course we will interrogate culture as a *text* for our own analysis. In other words, we will be applying our literary tools toward the interpretation of culture.

The questions we investigate on a daily basis will sweep broadly under the ever-broad rubric of culture, observing the various and often conflicting uses and meanings of the culture concept. We will start by exploring the very ideas of culture and literature, then familiarize ourselves with various theoretical approaches to the culture-text, and along the way study specific examples of those texts—Hendrix campus architecture, commercial advertisements, and cultural icons like the hillbilly, to name a few. Finally, we will turn our attention to the ephemeral community of AGS as material for our introduction to cultural studies.

#### Literary Theory in the 21st Century – Allen Frost

In this course, we will bring contemporary literary theory to bear on a range of texts, from fables and

films to sonnets and short stories. We will consider a number of approaches to the study of literature as we pose new questions. For example, what can psychoanalysis tell us about Rapunzel, or Frozen? How can ecocriticism inform our understanding of Romantic poetry? What does socioeconomic theory have to say about television sitcoms?

Readings will include works by John Barth, Lyn Hejinian, Toni Morrison, Wallace Stevens, and Robert Frost, among others. Throughout the course, we will continually ask ourselves how, when, and why theory should be used in our encounters with the literary.

## **Practical Poetics – John Andrews**

From The Kings of Leon shaking "the poet and the beat" to Eminem claiming to not be much of a poet but knows that someone told him "to seize the moment," popular culture views poetry and poets as revered things. If popular music, film, and tv all view poetry as something elevated and separate, then what is the role of poetry today? At the same time, Alexandra Petri claimed in the Washington Post "poetry is dead." If this is true, what is the point of poetry today? What is poetry today? This course will interrogate and attempt to answer these questions by analyzing the work of contemporary poets such as Karyna Mccglyn, Richard Siken, Michael Dickman, and others to approach and define contemporary poetry. From here we will then create contemporary poetry through the techniques and theories presented and offer up our own texts as examples of contemporary poetics.

## Short Forms: A Study in Prose – Jessica Pitchford

In this course, we will turn the writer's lens on the briefest of prose forms: flash fiction and flash nonfiction. These extremely short narratives, which can vary in length but are on average no more than 750 words, are increasingly popular if difficult to achieve—a real creative challenge. This course both introduces participants to the art of the short-short form and prepares them to participate in traditional workshops and even slams. In-class activities include discussions on craft, using texts like Sudden Flash Youth and Brevity for readings, as well as individual and group writing exercises. We'll also talk about the ever-blurring boundaries between story and memoir, how to determine which genre best fits the writer's aim. The ultimate goal is to get students reading and writing one of the most progressive forms of prose being published today.

#### MATHEMATICS

#### **Probability and Statistics: A Study of Uncertainty – Stacy Key**

Life is full of uncertainty. However, most people try their best to plan, predict and prepare for the future. Some people rely on chance, fate, and luck in their predictions, while others base their findings on logic and scientific methodology. Our study will be based on this logical and scientific approach. Probability has been defined as "the branch of science concerned with the study of mathematical techniques for making quantitative inferences about uncertainty." Most historians consider this branch of science as beginning with the work of Fermat and Pascal in the early 1600s, but the use of this science has grown exponentially over the last few decades. This course will examine techniques and concepts widely used in probability and statistics from both a theoretical and practical perspective. Examples

from the "real world" in the areas of insurance, politics, finance, engineering, medicine, meteorology, and management will be used to add relevance and practicality to our study.

#### How Big is Infinity Anyway? - Lars Seme

Though infinity is not actually a number in the usual sense, in this class we will discuss the different ways infinity can be approached mathematically, including the arithmetic of the infinite. Along the way, we will consider the construction of the Natural, Rational, Real, and Complex Numbers and their properties. For example, we will define what we mean by addition and use this to prove why 1+1 = 2. The class will conclude with the treatment of infinity using both Cardinal and Ordinal Numbers.

# The Shape of Space: The Geometry and Topology of the Universe – Josh Ulrey

The purpose of this course is to give students an insight into the current theories concerning the shape of our universe. The course begins with the study of two-dimensional surfaces, with a specific focus on the geometric and topological properties that can be used to determine whether or not two surfaces are equivalent. This discussion culminates in the complete topological classification of all two-dimensional surfaces. These ideas are then expanded to higher-dimensional surfaces, with special attention given to the universe in which we live and recent studies about its geometry and topology.

#### NATURAL SCIENCES

# The Science Behind Renewable Energy – Stephen Borutta

In 2012, the three major fossil fuels - petroleum, natural gas, and coal - accounted for over 80% of the nation's energy production. Not only do all of these fuels produce pollution, but they are finite in nature. A greener and more permanent alternative to these fossil fuels are renewable energies like solar, wind, biomass, or hydrogen. In this class, students will dive into the science behind a few of these energies, and discuss their benefits and limitations.

# Life's Endless Wonders – Elijah Carter

Did you know that the tongues of some woodpeckers are so long that they wrap around the back of the skull when retracted? Or that there are about a million ants on Earth for every human? That your body contains more bacterial cells than human cells? That female fig wasps are born pregnant?

This course will focus on these exceptional examples of biology. We will explore how scientists collect data to tell the fascinating stories behind ecological phenomena (and how other scientists sometimes collect additional data to demonstrate that these stories may be more complex than was once thought). Through the course, we will learn about how ecologists and evolutionary biologists view complex systems through the lenses of population genetics, environmental and biological influences, and natural selection.

# **Origins of Implications of Modern Physics – Dwight Daugherty**

This course will explore the beginnings of modern quantum physics. From Planck and De Broglie to modern string theory we will discuss and explore the history and implications of the quantum universe we live in. The evolution in the way we view our universe and how we perceive that universe will be the

primary focus. Socratic discussions, demonstrations and select activities will be utilized in the classroom.

From the earliest theories of wave particle duality to the implications of the Copenhagen interpretation, we will advance to our present day view of modern physics. Attention will be given to the implications of this theory particularly the effects of quantum thought on the origins, structure and development of our universe. Recommended reading is "The Dancing Wu Li Masters" and "The Elegant Universe".

## **Thinking About Scientific Thought – Tim Trawick**

How do we arrive at conclusions in science? How does mathematics guide our thinking? What support do we need to confirm, contradict or reshape a scientific law or theory? How does scientific theory inform other "truths" and "policies" that we use to guide our lives?

This course will focus upon scientific thinking. Logic, reasoning, mathematics guide thought while empirical observations are the hallmark of scientific endeavor. Interesting topics will be discussed as they pertain to the "quest for truth" such as: cosmology (age and history and content of the universe); popular conceptions / misconceptions of physical reality; the interface between religion, science and philosophy; the background and birth of quantum theory; applying science in modern technology and policy. Students will be expected to read, write and contribute to class discussion.

## **SOCIAL SCIENCES**

#### Introduction to Sociology – Dr. Rapheal Lewis

This course covers a specific methodology centered around critical thinking, while at the same time engaging the patterns of thought of the early sociologist. It has been always a matter of curiosity how people get along with others, what they do for a living, and who and how people select leaders. Over the years there have been countless observations about human behavior. This course attempts to examine some of these in terms of content and consequences. Each student will be required to complete at least two requirements.

1. They must select one of the early sociologists and discuss their philosophy and methodology and the reasons for their choice. All of this should be prepared and presented in an essay or some other form, based on the student creativity.

2. A research design or a plan to investigate a sociological problem at some time in the future must be developed.

#### **Developing Nations – Kondwani Phwandaphwanda**

Students will explore political systems in selected developing countries and examine how governments within those political systems serve their people to help them improve their lives. Discussion will focus on a number of areas including education, employment, health, food production and security, and civic education. Students will also discuss how international development impacts the lives of people living in poor countries.

Selected readings will be used for lectures and class discussion. Different activities will be used to accommodate the learning styles of students to give each student a chance to maximize his/her learning process. Students will also be encouraged to conduct basic research for their own further understanding of material discussed in class.

## **Understanding Modern America – Jim Ross**

This class will examine the images Americans have of themselves, their government, and other social institutions in modern America (1945-2014). Americans find themselves vacillating between nostalgia for a golden past and cynicism about the present and the future. In this class, we will examine how the choices of those in the past combined with the choices we make as individuals and a society in the present have shaped our current understandings of our nation. By exploring the importance of worldviews, and the importance of how worldviews are constructed, this class will help students look at the past and use it to help them decide the best way to respond to our rapidly changing world.

Specifically we will look at issues like the role of the government in the economy during and after World War II, the role of advertising men in the creation of a new consumer culture that began to market "hip," the rise of experts who "explained" reality to families, a foreign policy based on exporting American democracy, the rise of the "rights" movement in the 1960s, and the rise of mass movements for change in the 1960s. In looking at the past we will try to understand our present.

We will use primary sources documents, music, art work, television commercials, and numerous other sources to allow each student to come to his or her own conclusions about the questions we are asking. In the end, each student will be his or her own historian. Each student will be expected to use evidence to defend his or her conclusions.

We will specifically ask the following questions:

- 1. Why is the United States like it is in 2014?
- 2. How do we live between nostalgia and cynicism about the modern world?

3. How do we live with our deepest differences and at the same time guarantee liberty and justice for all?

#### Power of Words in Political Conflict and Debate - Dr. Peggy Scranton

This class explores how the meaning of words and the choice of words affect not just who wins or loses political conflicts and debates but also the meaning of winning and losing. Our purpose is to examine how words influence "who gets what, when, and how," which is Harold Lasswell's enduring definition of politics. Words can enhance or diminish a speaker's message; they may enlighten some and confuse others; political labeling can help or hurt a person or group or cause. Language used in political speech conveys multiple meanings and creates differential outcomes as some listeners hear threats while others hear promises. Following the insights of Murray Edelman, who pioneered the study of "politics as spectacle" and "the political uses of language," we will examine how selected words call some to action and reassure others that they need not act.

We will consider the resource value and impact of words on conflict and political debate described in two types of cases: 1) the utility of military force and negotiations in extending and maintaining security structures in general and specifically in the Peloponnesian War, and 2) nonviolent movements against brutal dictators, specifically the Serbian student OTPOR struggle against Milosevic in 2000-2001 and the Liberian Women's Peace Movement, for which two activists received the Nobel Peace Prize in 2012.

Sources students will read/observe include

- An introductory provocative essay about conflict and conflict resolution in the Ukraine
- the Melian debate and Pericles' Funeral Oration from Thucydides' *History of the Peloponnesian War*;
- former Czech President Václav Havel's 1989 acceptance speech, "A Word About Words," written for the Peace Prize of the German Booksellers Association and his essay "power of the powerless," and an obituary from the New York Review of Books written by Paul Wilson
- documentary videos on recent, successful nonviolent movements against brutal dictators: on OTPOR from the series "A Force More Powerful" and a documentary film on Liberia, "Pray the Devil Back to Hell."

Our approach to the conflicts stresses the rhetoric of the powerful vs the (apparently) powerless, the use of symbolic speech along with "words," the power dynamics of bargaining using force and words, and prospects for peace after violent and nonviolent conflicts. Our approach political policy rhetoric stresses alternative views of the role of government, economic philosophy and priorities, ways spokespersons frame issue positions, and audiences to which they target appeals.

In terms of writing and participation, students will

- create individual and/or group projects concerning the meaning of the Melian debate, create a piece of propaganda for or against OTPOR,
- write a comparative analysis of the nonviolent movements in Serbia and Liberia and then participate in a debate about which movement was more successful
- write reflective assessments of texts and documentaries

We will complete a variety of in-class writing and discussion exercises designed to include all members of the class. In addition to "silent discussions," in which each student writes what they would say out loud, we will engage in non-intimidating, non-competitive ways to participate in class as well as class debates.

During the last two days of class, students will share their individual/group projects. These will convey lessons learned about words, power, debate, and conflict, using a format of their choice, such as narratives about the causes and dynamics of conflict and conflict resolution; images of conflict and debate, such as comic strips/graphic novels, political cartoons, or pamphlets/propaganda; creative writing about the nature of political debate, and of violent and/or nonviolent conflict; enactment of a political debate; and/or re-enactments of the cases.

# Area II: General Conceptual Development

**Sarah Baver, Revis Edmonds, Alan Elrod, Tara Flanagan, Jim Rush, Phillip Spivey, Ray Wheeler** Area II focuses on thinking – on the ways we think, on the assumptions that underlie our own thinking and the thinking that takes place within the various disciplines, on cutting edge developments that have influenced our thinking about truth and knowledge, and on means of thinking more effectively.

Since Area II brings together students from all eight Area I disciplines, instructors can help students explore connections and differences between the disciplines and help them understand various approaches to truth and reality.

Area II classes also draw on speakers, films, and readings as subjects for discussion; students interact directly and frequently with leading figures in a variety of fields and learn to watch films, not simply as forms of entertainment, but as works of art open to critical examination.

Area II begins by introducing students to thinking about thinking, teaching them to be more conscious of their assumptions, the soundness of their logic, and different points of view based on different assumptions. Students express their opinions but also learn about the importance of evidence, logical thinking, and clarity of definition and expression.

As the course progresses, they confront new ideas and new ways of thinking, and they address complex moral and ethical questions, not in order to learn what they should think, but in order to learn how to base decisions and actions on an informed consideration of appropriate issues and evidence.

By the end of the course we hope they will have a clearer understanding of their assumptions and of the thinking process in general.

We also hope that they will understand other points of view and have an awareness of complex issues, as well as an appreciation for well-informed and solidly supported ideas.

Finally, we hope that they will be excited about thinking.

#### Area III: Personal and Social Development

# Fred Boosey, Debbie Hibbs, Elizabeth Martin, Spencer Sutterfield, Kelly Taylor, Chad Terrell, Jody Webb

Area III is designed to foster the personal and social development necessary for the students to benefit fully from their Area I and Area II classes and the comprehensive cultural and social events of the AGS program. The concept of Area III emerged from the need of students to process and discuss information

and experiences. This makes learning more active and meaningful and enables students to develop accountability for their own educational, social, and cultural environment. By integrating all the academic classes and events, the curriculum of Area III strives to provide an opportunity for the students to see the importance of taking personal responsibility for one's own ideas and for one's participation in a democratic society. The students learn that ideas do have consequences and that "good thinking" means looking at the implications of ideas as well as the assumptions behind them. Area III provides a forum for actively exploring civic responsibility; it seeks to inspire a student's understanding of his or her own personal potential and then to impress upon the student the value of character, leadership, integrity, insight, and compassion, not only within their own communities, but in society at large. It is within this framework that students explore curricular issues such as social theory and responsibility, theories of intelligence, conflict and stress management, psychological and personality theory, goal setting, and service. Area III emphasizes a basic understanding and application of psychology and sociology as it relates to the development of student potential.

Area III classes provide an opportunity for students to respond to featured films, speakers, cutting-edge topics from each of the disciplines, special events, and even current events, with the goal of strengthening social development. Students are encouraged to participate in classroom interactions, small group discussions, simulations, role playing, and other learning strategies. Participation in these activities stimulates an understanding of community involvement and decision-making. In addition, readings, surveys, personality inventories, and optional journal writing encourage personal growth.