The 2016 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.

Faculty

Area I: Arts — Fred Boosey, Coordinator

Choral Music
Adam Stanley
Daniel De Togni

Drama
April Gentry-Sutterfield
Candrice Jones

Instrumental Music
Tom McDonald, Conductor
Rick Dimond
Gerry Gibson
Larry Jones

Visual Arts
Kimberly Kwee
Jason McCann

Area I: Academics — Stacy Key, Coordinator

English/ Language Arts
John Andrews
Wesley Beal
Brian Hunt
Jessica Pitchford

Natural Sciences
Matthew Bradsher
Kacey Hight
Timothy Trawick
Blake Whitt

Social Sciences
Mark Elrod
Rapheal Lewis
Kondwani Phwandaphwanda
Peggy Scranton

Mathematics
John Anglin
Stacy Key
Lars Seme

Area II: General Conceptual Development
Jim Rush, Coordinator
Nick Brasovan
Revis Edmonds
Andrea Lively
Ryan Parson
Phillip Spivey
Lacey Thacker
Christopher Weaver

Area III: Personal and Social Development
Debbie Hibbs, Coordinator
Fred Boosey
Richard Gobble
Winston Meyer
Madison Sewell
Spencer Sutterfield
Kelly Taylor
Chad Terrell

Area I: Arts

Drama

April Gentry-Sutterfield and Candrice Jones

The 2016 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

Adam Stanley and Daniel De Togni

The Choral Music program will broaden and strengthen students' musical knowledge through experiences of rehearsing, performing, vocal technique, analyzing, and discussing a wide range of choral repertoire. While a significant portion of the class will be committed to preparing works for performance at Arkansas Governor's School, students will also gain exposure to a variety of topics relating to music theory, history, and choral traditions from several Musical eras. Students will also be exposed to more recent trends in choral music as well as experimental music from the 20th century. An additional facet of the course aims to introduce singers to interdisciplinary performance with students and faculty in Instrumental Music, Drama and Visual Arts

Instrumental Music

Tom McDonald, Rick Dimond, Gerry Gibson, Larry Jones

The AGS 2016 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 I 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

Practical American Poetics - John Andrews

In a 2015 interview Kelly Clarkson described Ed Sherran as a "poet." But is he really? If popular music, film, and TV view poetry as something elevated and special, what is the role of poetry today? On the opposite end of the spectrum: the National Endowment for the Arts did a study on "Arts in America" in 2012 and found that only 6.7% of adults actively read poetry. With this data, what is the point of poetry today? Can poetry even matter today?

This course will interrogate and attempt to answer these questions by analyzing the work from the American poetic tradition. The course will center on work from canonical poets such as Ai, Frank O'Hara, and C.D. Wright along with contemporary poets such as Richard Siken, Patricia Smith, and Ocean Vuong. From here we will create contemporary poetry through the techniques and theories each Poet employs, and be able to personally define, recognize, and defend what makes up the art of poetry in America today.

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 Barthes's and Geertz's approaches to the culture-text, and along the way study specific examples of those texts—for example, campus architecture, commercial advertisements, theme parks, and propaganda. Students will complete the course by designing and presenting a cultural studies lesson plan of their own.

From Hieroglyphics to Emojis #TechnologicalMedia – Brian Hunt

In what some bloggers are calling a "post-text" world, new ways of reading and writing are changing how we think. Since humans first began to paint signs on cave walls, new technologies and media for storing and sharing information have enabled us to be where we are today. Technological media has always been evolving, and the tools we use to transmit and store ideas are not simply tools; they alter the way we perceive and interact with the world. Engaging with hieroglyphics, cave paintings, emojis, visual poetry, the book, cryptography, cartography, tweets, texts and Instagram, among others, students of this class will consider how different media have enabled us to tell different stories. Through a deeper understanding of the history of technological media, students

will consider the networked mind while exploring their own thoughts on and beyond the confines of the physical page.

Flash Fiction - Jessica Pitchford

In Flash Fiction, our focus will be on the briefest of fiction forms: the short-short story (also known as fast fiction, flash fiction, or micro fiction, among others). These extremely short stories, 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 story and prepares them to participate in traditional workshops and even fiction slams. In-class activities include reading discussions, individual and group writing exercises, as well as peer workshops. The ultimate goal is to get students reading one of the most progressive forms of fiction being written and published today and trying their hand at creating their own.

Mathematics

Mathematics and Aviation – John Anglin

This class will examine some practical applications of mathematics as they apply to aviation. Some examples that will be presented include a mathematical understanding of the forces of flight, trigonometry in navigation, and an introduction to electrical systems theory. There will also be critical thinking exercises applied to various scenarios an aviator would be expected to encounter. The focus of this class is not to produce professional pilots, but rather to demonstrate a practical application of mathematics to a tangible real world environment.

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.

The Mathematics of Infinity - 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.

Natural Sciences

Prevention, Diagnosis, and Rehabilitation - Matt Bradsher
We will look into the workings of the human body, specifically the structure in relation to function and vice-versa. We will look at the ways the environment affects our body, and techniques to control responses to provide us advantage. Lastly, we will look at our own health and develop a plan to improve in at least one area over the course of our AGS session.

From Diagnosis to Drugstore- Kacey Hight
Most all of us are familiar with the process of being diagnosed by a physician and shortly thereafter picking up our prescriptions at the pharmacy. On the health care side of that process is an immense amount of knowledge that allows us to understand and treat these diseases, both at an individual and community level. In this course, we will explore this train of knowledge that takes us from diagnosis to the drug store. Students will walk away from the course with a greater understanding of the process of treating common diseases such as diabetes and hypertension, and how a variety of different scientific disciplines contribute to our experiences as patients.

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 and standard models that describe the way physicists and astronomers understand and describe the universe. Explanatory power, mathematical formulation, and empirical observations are the hallmark of scientific endeavor and serve as ways to evaluate models we use to describe the world around us. Interesting topics will be discussed as they pertain to the “quest for truth” such as: cosmology (age, history and content of the universe); the interface between religion, science and philosophy; the background and birth of quantum theory and relativity; and the challenges of applying science in modern technology and policy. Students will be expected to read, write and contribute to class discussion.

The Biology of Introspection - Blake Whitt

Science requires a thorough understanding of how our tools of measurement work; otherwise any data we obtain -and the conclusions we draw from them- are meaningless. Strange, then, that the one tool used in *all* measurement (our brain) is in many ways still poorly understood. If science is to further investigate and understand phenomenon in nature, should we not first understand ourselves? This course will focus on the explanation of the neurobiological underpinnings of human behavior, emotion, and perception. We will begin with an overview of the molecular and cellular components of mammalian nervous systems. Then, using recent research articles from the field of neurobiology, we will discuss "the human experience" while challenging the conventional understanding of concepts like reality, love, culpability, and free will.

Social Sciences

The ABCs of International Relations – Mark Elrod

International relations (IR) is a subfield of political science and is studied from both a theoretical and practical perspective. In IR, the two-most widely used theories (paradigms) are realism (*realpolitik*) and liberal-idealism. Realism understands the international system as anarchical in nature with nation-states seeking to acquire the power they need to protect their interests in a hostile world. Liberal-idealism holds that nations and individuals are cooperative in nature and often work together to achieve common goals in terms of security, trade, and resources. To that end, liberal-idealists believe that international institutions such as the United Nations and the European Union demonstrate and strengthen global cooperation and integration. In this course at AGS, we will examine the core assumptions of these two paradigms and apply them to real-world problems and situations. Students will also learn key concepts (A-Z) that can be used to illustrate the theoretical world of realists and idealists.

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 students' 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.

Resilience, Governability, and American Politics - Dr. Peggy Scranton
Resilience refers to the capacity of individuals and groups to thrive in adversity as well as good circumstances. Governability refers to both institutional performance and popular consent. We will use these two concepts to examine how our government and politics are functioning at the national level and how some communities are thriving despite challenging conditions. We will read two expert commentaries and follow up with our own research to fact check and elaborate on these authors' themes and evidence.

Area II: General Conceptual Development

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

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 stimulate an understanding of community involvement and decision-making. In addition, readings, surveys, personality inventories, and optional journal writing encourage personal growth.