

## SUMMER HONORS PROGRAM CLASS DESCRIPTIONS 2018

### **Animal Science (Agriculture)**

**Class Description:** Study the world of animal science from the microscopic organisms to the large livestock that influence the productivity of the state of Nebraska. Not for the faint at heart, you might get dirty during the activities. **(This class requires the nominated student to complete a screening examination).**

### **“The Art of Illustration” (Art)**

**Instructor:** Amy Lynn (Stevenson) California

**Class Description:** All works of art have a point of view and tell a story.

That story can be told in a single image, but often artists will present narratives by using a series of many images, representing several visual moments, such as in illustrated children's books or graphic novels.

Our class will dissect the visual idea of a Basic Story; we will explore characters and their lines of conflict in relationships, and expand the concept of a Beginning, Middle and End.

We will use drawing and acrylic painting to develop your awareness of color, gesture, composition, and symbolism to tell both classic tales and original stories in creative and unique ways.

**(This class requires nominated student to complete a Portfolio of 3 of their best two-dimensional art pieces.)**

**For Art Portfolio requirements, go to [esu11shp.org](http://esu11shp.org) , Art, Portfolio.**

### **“How Do You Make Mario Jump?” (Computer Science)**

**Instructor:** Jonathon Irons, California

**Class Description:** How did we ever get from giant, room-filling calculators to little boxes you could plug into a TV and have hours of fun with? This year we are going to explore the early history of video games in order to understand more about how computers function on a physical level. By examining the work of early pioneers like Atari and Nintendo, this course will cover a range of fundamental computer science topics including symbolic logic, the creation of programming languages, and electrical engineering. We will be working as a class to put these topics to use on a final group project by creating a working prototype of our very own Nintendo cartridge. **(This class requires the nominated student to complete a screening examination).**

### **“Character Study: The Stumbling Journey” (Creative Writing)**

**Instructor:** Gary Dop, Virginia

**Class Description:** This year, between contemplating life and the meaning of 11:42, we will focus our attention on developing fascinating characters. Drawing from real life and our imaginations, we'll construct complex, flawed and engaging people. We'll experiment with how our characters behave and respond, and we'll ask those central narrative questions: what do they want, and why do they want what they want? As usual, we'll shape our essays, stories, and poems to include in our annual anthology. **(This class requires nominated student to complete a Portfolio of their best writings. For Creative Writing Portfolio requirements, go to [esu11shp.org](http://esu11shp.org) , Creative Writing, Portfolio, Creative Writing)**

### **James and the Giant Peach (Drama)**

**Instructor:** Cara Anderson-Ahrens, Washington

**Class Description:** This year the SHP Drama class will be doing the Pasek and Paul's musical adaptation of Roald Dahl's famous story, James and the Giant Peach. With an amazing musical score and characters who are larger than life, this kid's book has been transformed into a dazzling musical journey. This class will include 9 actors, two assistant stage managers/choreographers, and three technical theater personnel. Join James, his two cruel aunts, and an unlikely set of insect allies as their lives are all changed forever by the magic of a giant peach. Feel free to pre-view some of the music from the show on YouTube, it will spark your imagination. **(This class requires nominated student to complete a short video audition and a resume of their acting and technical production experience.) For Drama Portfolio requirements, go to [esu11shp.org](http://esu11shp.org) , Drama, Portfolio.**

### **Videos in Unexpected Places (Film Production)**

**Instructor: Aaron Sawyer, Illinois**

**Class Description:** Playing with how screen location can affect creative possibilities . Think gas station pump TVs or a urinal or student locker or hallway or ceiling or the equivalent of those old consecutive road signs advertising something in a long message as you drive. **(This class requires nominated student to complete a screening examination.)**

### **Mindful Thinking for the Gifted (Logic)**

**Instructor: Hrannar Baldursson, Norway**

**Class Description:** The students will be introduced to ideas on various topics within the fields of logic, ethics, aesthetics, metaphysics and epistemology. Each student is to discover their own approach to the meaning of the ideas contained in the texts, videos and ideas presented, by cooperating in a discussion on themes selected by the group. While participating in the discussions, the instructor focuses on methods for enhancing the critical, creative and caring thinking skills of students, and assists them in becoming more careful listeners, while communicating their thoughts to their companions rather than only expressing them, or only listening. Any open-ended questions may be asked during the class by any participant, and students are encouraged to answer and contribute according to their present knowledge and believes. If they do not understand a concept or a word, they will be encouraged to use their own thinking skills in a community of inquiry to figure it out. **(This class requires the nominated student to complete a screening examination).**

### **Mathematical Connections Class 2018 (Math)**

**Instructor: Audrey Powers Malagon, Virginia**

**Class Description:** This year the mathematical connections class will be studying abstract mathematics. We'll look at the structure of different number systems, exploring how basic operations work, and what happens when we "change the rules" in the number systems we know. We'll explore the algebraic structures of groups, rings, and fields and make connections to integers, rational numbers, and the real numbers as well as groups that describe the symmetries of various objects.

### **\*Health Science in Rural Communities (Medical Science)**

**Class Description:** The Medical Science program will include an overview of the diverse fields of medical/health science. This class is being developed in cooperation between staff members of The University of Nebraska Medical Center in Kearney, CHI Health Good Samaritan, Phelps Memorial Hospital, Central Nebraska Area Health Education Center, and other healthcare professionals. Students will participate in many hands-on experiences in order to learn about various health care professions. The first week will consist of scheduled tours and discussion periods in area health facilities. The second week, the students will spend time observing/shadowing health professionals in various health care centers in or near the ESU #11 area. The students are expected to participate in night activities in Holdrege. Two restrictions are involved in the nominating and selection of students for medical science: (1) Students must be from the grades that include outgoing 10<sup>th</sup> graders through outgoing 12<sup>th</sup> graders in high school. (2) Students attending SHP Medical Science in previous years are NOT eligible to attend Medical Science class again. **(This class requires the nominated student to complete a screening examination).**

### **DNA DETECTIVES (Science)**

**Instructor: Peggy Tilgner, Nebraska**

**Class Description:** 23 and Me®, Jurassic Park, WWII MIA's, 1918 influenza pandemic, lactose intolerance, GMO's, whodunits. What do all of these have in common? As DNA detectives, students will study genomics, evolutionary biology, genetic manipulation, and basic molecular forensic science. Students will use data and materials drawn from actual genetic research and forensic files to answer these questions. Ethical considerations will be a significant part of the class. **(This class requires the nominated student to complete a screening examination).**

### **\*Design: The Architecture of Self & Community (Engineering)**

**Instructor:**

**Class Description:**

**(This class requires the nominated student to complete a screening examination).**

### **SHP Special Intern**

There will be two students selected as “Special Interns.” These students will assist the Director and the SHP staff with the many projects that are happening at the Summer Honors Program. Computer skills and keyboarding skills are very important for this position. They will also be responsible for keeping the FaceBook page updated. The Special Interns will learn about program management and will participate in small and large group activities. **(This position requires the nominated student to put together a Resume of their qualifications. Go to [esu11shp.org](http://esu11shp.org) and choose Special Intern Resume Info to find what is needed on this resume.)**

### **SHP Web Master/Photographer**

The students selected as the Web Master/Photographer will take pictures during the program and put together information about the classes and activities at Summer Honors. They will be responsible for updating the FaceBook page, and are expected to take pictures both during the day and during nighttime large group activities. Technology skills are important for this position. **(This position requires the nominated student to put together a Resume of their qualifications. Go to [esu11shp.org](http://esu11shp.org) and choose Web Master/Photographer Resume Info to find what is needed on this resume.)**