

# Uni High Summer Enrichment Camp 2017 Week 2 Class Descriptions

Week 2: June 12-16, 2017 9:00am to 3:00pm

Week 2 Morning Sessions: 9-11:45am (5)

#### **Robotics**

Teachers: Martin Grosman, Chloe Pollock-Muskin, Isandro Malik

Learn the basics of Robotics and Engineering. Students will work in teams to construct a robot that completes a series of challenges. Each challenge is designed to expose our students to a new facet of robotics, ranging from basic programming, to sensor usage, to structural integrity. No prior experience is required, as the class begins with a crash course on all the parts and their respective functionalities.

### **Painting and Printmaking**

Teacher: Lisa Evans

Enjoy the great outdoors by creating art inspired by the natural world. We will explore the textures, patterns and shapes we find in nature and use these observations to create prints and paintings of our own. We will also investigate how artists work with nature and will take field trips to campus resources to explore connections between nature and art.

### **Aerospace Engineering**

Teacher: Elle Wroblewski, M.S.

Challenge your creative abilities by spending the week designing and experimenting with your own wooden gliders, miniature parachutes, Alka-Seltzer rockets, and paper helicopters. Participate in design activities that teach the fundamentals of Aerospace Engineering, while also demonstrating the importance of creativity and innovation as you design. Solve orbit problems like Katherine Johnson from *Hidden Figures* with a step-by-step math workshop. Learn about how rockets were developed in China and how they are used today. Discover how jet engines work, how to collect data and run experiments as well as the history and future of air and space technology. Believe it or not, all of this in one week!

## Our Amazing Illinois Parks (all day - continues into the afternoon session)

Teacher: Chris Guyotte

Illinois is rich in public parks. They offer recreation in a natural setting with plenty of places to explore, play and hang with your friends. Pack a lunch and get ready to have some fun in the woods, on the prairie and near the water. Each day we'll travel to a different park near the Champaign Urbana region. You'll want to bring bug spray and maybe a bathing suit depending on the weather. We will leave daily at 9:15 and return for the afternoon pick up.

### Boys' and Girls' Basketball

Teacher: Kristi Bandy

Interested in basketball, but never played before? Love basketball, but want to improve your skills? Come participate in a variety of drills catered to teaching the rules and fundamentals of the sport. Each day participants will be given the opportunity to improve their ball handling, shooting, and overall basketball IQ to prepare them for competition at the high school level. Participants will also learn the importance of working as a team in order to be successful.

# Week 2 Afternoon Sessions: 12:15-3pm (4)

### **Photography Challenge**

Teacher: Lisa Evans

Learn photographic principles and techniques and put them into practice during daily photo shoot challenges on the U of I campus. Each student will have access to a digital point and shoot camera plus learn basic photo editing skills. We will also visit University photo collections to learn from history. Capture your world and improve your artistic eye in this handson course.

### Leadership in Group Work

Teacher: Kristi Bandy

Working in groups is an essential skill every student needs to feel confident navigating. It is important to understand the different roles involved in group work and how each student can maximize his/her leadership potential. In this class, students will learn what it means to work in a group effectively, different roles each student may have in a group, and how to utilize critical thinking skills to solve problems. Students will be encouraged to push themselves out of their comfort zones and experience different leadership roles—this helps each student build perspective about each role in the group, even if it isn't their strength. Students will engage in group games/activities each day challenging their problem-solving and communication skills.

### Our Amazing Illinois Parks (all day - continues from the morning session)

Teacher: Chris Guyotte

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### How to Write a Paper while Walking your Dog

Teacher: Elizabeth Majerus

Most people procrastinate when they have a big paper to write, and then end up writing it in a day or two rather than making full use of the time they have. Some of us even write important papers in one sitting, which is the most painful way to do it, and the least likely to lead to a good paper. This class will teach you the basics of the writing process and introduce you to some writing strategies and methods that, if you follow them, will make your papers much better *and* make writing easier and more fun.

Download registration forms at https://uni.illinois.edu/camp.