



BOY SCOUTS
OF AMERICA®

STEM University 2022-SIUE Scouts BSA College Class Catalog

Event Contacts

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Registration opens September 27, 2022

Visit www.scoutingevent.com/312-STEMUSIUESBSA22 to register



BOY SCOUTS
OF AMERICA®

GREATER SAINT LOUIS AREA COUNCIL



Class Catalog

STEM University 2022-SIUE Scouts BSA College: STEM U 2022 SIUE Scouts BSA College at Southern Illinois University-

STEM U SIUE (Scheduled Classes)

SIUE12 9-12 PM



Aviation Merit Badge

For most of history, people have dreamed of flying, imagining how it would feel to soar through the sky like an eagle or hover in midair like a hummingbird, to float on unseen currents, free of Earth's constant tug, able to travel great distances and to rise above any obstacle. Today, through aviation, we can not only join the birds but also fly farther, faster, and higher than they ever could.

Maximum number of participants: 20

http://www.scouting.org/filestore/Merit_Badge_ReqandRes/Aviation.pdf

Prerequisites: 4

Bill Oshaughnessy

SIUE12 1-4 PM



Aviation Merit Badge

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Prerequisites: 4

Bill Oshaughnessy

SIUE30 9-12 PM



Bird Study

Birds are among the most fascinating creatures on Earth. Many are beautifully colored. Others are accomplished singers. Many of the most important discoveries about birds and how they live have been made by amateur birders. In pursuing this hobby, a Scout might someday make a valuable contribution to our understanding of the natural world.

Maximum number of participants: 15

Holly Thompson

SIUE30 1-4 PM



Bird Study

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Maximum number of participants: 15

Holly Thompson

SIUE4 9-4 PM



Chemistry Merit Badge

Chemistry explores how substances react with each other, how they change, how certain forces connect molecules, and how molecules are made are all parts of chemistry. Stretch your imagination to envision molecules that cannot be seen - but can be proven to exist - and you become a chemist.

Maximum number of participants: 15

http://www.scouting.org/filestore/Merit_Badge_ReqandRes/Chemistry.pdf

Prerequisites: 4a: Taste raw onion, cooked onion, browned onion.

Cindy Meredith

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SIUE29 9-12 PM

Steve Thompson



Citizenship in the World

Scouts who earn the Citizenship in the World merit badge will discover that they are already citizens of the world. How good a world citizen each person is depends on his willingness to understand and appreciate the values, traditions, and concerns of people in other countries.

Maximum number of participants: 15

Prerequisites: "Print out" a copy of the "MB worksheet" & sit down at a computer & fill in answers to all 7 requirements before class. (11 pages).

<http://www.usscouts.org/mb/worksheets/citizenship-in-the-world.PDF>

SIUE29 1-4 PM

Steve Thompson



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<http://www.usscouts.org/mb/worksheets/citizenship-in-the-world.PDF>

SIUE31 9-12 PM

Ben Birgen



Collections

Collections

Collecting can be an educational and financially rewarding pastime: a collector must educate himself about a specific subject, be able to tell which items are worth preserving, how to catalog and organize his collection, and how to evaluate the value of items.

Maximum number of participants: 10

Prerequisites: Coin & stamp collections are not allowed. pre-requisites #1-5.

SIUE20 9-4 PM

Jay Byington



Composite Materials

Composites can be found just about everywhere: in airplanes and sports cars, golf clubs and guitars, boats and baseball bats, bathtubs and circuit boards, and even bridges. Composites make bicycles and skis lighter, kayaks and canoes stronger, houses warmer, and helmets tougher.

Maximum number of participants: 15

Prerequisites: If a Scout intends to complete the Composite Material Merit Badge, they must do the following:

- Read the merit badge book thoroughly and be familiar with the information.
- Complete requirements 2, 4, and 6.
- Fill out the worksheet as much as possible. The Scout can use it during the review process at the end of the merit badge session.
- Our focus for the day will be to complete the projects and present an overview of the information with experts on hand. Scouts should take notes as they can use that information in addition to the information in the merit badge book and what they discover in their research during the final review.

Each Scout should bring the following:

- The Merit Badge book
- Paper and pencil
- The merit badge workbook, available online (meritbadge.org)
- A positive attitude to learn something new

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SIUE9 9-12 PM

Stephen Thole



Engineering

Engineers use both science and technology to turn ideas into reality, devising all sorts of things, ranging from a tiny, low-cost battery for your cell phone to a gigantic dam across the mighty Yangtze River in China.

Maximum number of participants: 15

http://www.scouting.org/filestore/Merit_Badge_ReqandRes/Engineering.pdf

Prerequisites: #1; #2; #5a; #5b; #6a; #6b; #6c; #6d; #6e; #6f; #6g

SIUE24 9-12 PM

Patricia Keithley



Health Care Professions

The practice of medicine has a rich history that spans several centuries. Since the first use of plants and other items as simple medicines and balms, many men and women have contributed to the advancement of the "healing arts."

Maximum number of participants: 15

Prerequisites: #7a; #10

NOTE: Prereqs: All Scouts should review the MB pamphlet for information and be prepared to discuss the listed items. 1,2,3, and 4: Pick ONE profession from the list to complete and be prepared to share all info with the group. Complete 9.

SIUE32 1-4 PM

Andy Potthast



Inventing

Inventing involves finding technological solutions to real-world problems. Inventors understand the importance of inventing to society because they creatively think of ways to improve the lives of others. Explore the world of inventing through this new merit badge, and discover your inner inventiveness.

Maximum number of participants: 15

SIUE25 1-4 PM

Patricia Keithley



Public Health

The field of public health deals with maintaining and monitoring the health of communities, and with the detection, cure, and prevention of health risks and diseases. Although public health is generally seen as a community-oriented service, it actually starts with the individual. From a single individual to the family unit to the smallest isolated rural town to the worldwide global community, one person can influence the health of many.

Maximum number of participants: 15

Prerequisites: #5a[1]; #5a[2]; #5a[3]; #5b[1]; #5b[2]; #5b[3]; #5b[4]; #7a; #7b; #7(i); #7(ii); #7(iii); #8

NOTE:

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Please read through the MB Pamphlet (and/or have it on hand to help with discussions) and complete items 5a OR 5b, 7a OR 7b (along with 1-3 following the options), and 8 before class.

SIUE6 9-12 PM

David Allsop



Radio

Radio is a way to send information, or communications, from one place to another. Broadcasting includes both one-way radio (a person hears the information but can't reply) as well as two-way radio (where the same person can both receive and send messages).

Maximum number of participants: 15

http://www.scouting.org/filestore/Merit_Badge_ReqandRes/Radio.pdf

Prerequisites: Requirement #4

Have paper/pencil with you the day of the merit badge.

Know your first name with letters from the International Phonetic Alphabet (Alpha, Bravo, Charlie, Delta...

Write down five tv or radio callsigns you hear (for example KMOZ, WNBC, WIBV).

Have the following written down on a piece of paper: first name, home town, school you attend, grade, your age, favorite subject, and interests.

SIUE22 9-12 PM

Doug Blair



Scholarship

Working on the Scholarship merit badge provides Scouts with a great opportunity to become more successful in school. They will learn how to improve their skills in the classroom, develop good study habits, and master techniques for writing reports and taking tests.

Maximum number of participants: 15

Prerequisites: #1a; #1b; #2a; #2b; #2c; #3; #4a; #4b; #5a; #5b

SIUE33 1-4 PM

Jason Brown



Shoot! Nova

Shoot!

This module is designed to help you explore how science affects your life each day.

Maximum number of participants: 15

Prerequisites: 1, 2, and 4

SIUE11 1-4 PM

Mark Ray



Space Exploration

Space is mysterious. We explore space for many reasons, not least because we don't know what is out there, it is vast, and humans are full of curiosity. Each time we send explorers into space, we learn something we didn't know before. We discover a little more of what is there.

Maximum number of participants: 15

http://www.scouting.org/filestore/Merit_Badge_ReqandRes/Space_Exploration.pdf

Prerequisites: none

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SIUE1 9-4 PM



Surveying Merit Badge

Earn the Surveying Merit Badge. While earning this merit badge, Scouts will discover how land is measured and how it is described so that others can know where boundary lines are. The First half of the class will be outdoors, and the second half will be classwork.

Maximum number of participants: 10

http://www.scouting.org/filestore/Merit_Badge_RegandRes/Surveying.pdf

Prerequisites:

Students need to know the answers to requirement 1, bring the deed copy as described in requirement 6 (or the deed of land owned by another family member or friend), and be able to describe what GPS is. Items suggested to bring: a notebook and 2 pencils. Reading of the merit badge pamphlet is **STRONGLY** recommended. Class will be conducted in room 0012 - the Surveying Lab. Scouts need to be dressed for the weather. Heavy rain or difficult weather conditions will result in the cancellation of the merit badge class.

Jeffrey Pauk

SIUE3 9-4 PM



Sustainability

Sustainability is an Eagle-required merit badge that'll teach you the incredibly important skill of conserving our planet's resources! In answering each of the requirements, you'll learn how to reduce your family's waste, protect our planetary systems, spread sustainability to others, and more.

Maximum number of participants: 15

http://www.scouting.org/filestore/Merit_Badge_RegandRes/Sustainability.pdf

Prerequisites: #1; #3a; #3b; #6

Eric Voss

SIUE19 1-4 PM



Weather

Meteorology is the study of Earth's atmosphere and its weather and the ways in which temperature, wind, and moisture act together in the environment. In addition to learning how everyday weather is predicted, Scouts can learn about extreme weather such as thunderstorms, tornadoes, and hurricanes, and how to stay safe.

Maximum number of participants: 10

Prerequisites: 10

Ben Birgen