



STEM University 2020- SEMO Scouts BSA College Class Catalog

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Registration opens October 24, 2019
Visit www.scoutingevent.com/312-stemu20semoscouts to register



BOY SCOUTS
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GREATER SAINT LOUIS AREA COUNCIL



Class Catalog







STEM University 2020- SEMO Scouts BSA College at Dempster Hall- Southeast Missouri State University

Stem U Semo (Scheduled Classes)

SUS101	9-4 PM		<p>Composite Materials</p> <p>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.</p> <p>Maximum number of participants: 15</p> <p>Prerequisites: 2, 4, and 6; obtain and read mb book, bring signed mb card by Scoutmaster, and be prepared to participate in all discussions with an attitude to learn something new.</p> <p>NOTE: Instructor: Jay Byington</p>
SUS105	9-12 PM		<p>Space Exploration</p> <p>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.</p> <p>Maximum number of participants: 20</p> <p>Prerequisites: 2 and 7</p> <p>NOTE: Instructor: Doug Stewart</p>
SUS114	9-12 PM		<p>Drafting</p> <p>Drafting is a highly refined form of drawing used to communicate ideas to engineers, architects, and craftspeople. In earning this badge, Scouts learn the importance of accuracy and simplicity in developing a drawing that shows precise details in a simple format</p> <p>Maximum number of participants: 25</p> <p>Prerequisites: Req: #4, last one covering careers</p> <p>NOTE: Instructor: Steven Ward</p>
SUS117	9-12 PM		<p>Geology</p> <p>Geology is the study of Earth. It includes the study of materials that make up Earth, the processes that change it, and the history of how things happened, including human civilization, which depends on natural materials for existence.</p> <p>Maximum number of participants: 25</p> <p>Prerequisites: None</p> <p>NOTE: Instructor: Shannon Todd</p>
SUS121	9-4 PM		<p>Astronomy</p> <p>In learning about astronomy, Scouts study how activities in space affect our own planet and bear witness to the wonders of the night sky: the nebulae, or giant clouds of gas and dust where new stars are born; old stars dying and exploding; meteor showers and shooting stars; the moon, planets, and a dazzling array of stars.</p> <p>Maximum number of participants: 25</p> <p>Prerequisites: 6 (b) sketch moon phases same time, for 4 nights and 8 (pick one) a,b, c,d, or e</p> <p>NOTE: Instructor: Dylan Thomas Henry</p>



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SUS123	9-4 PM		<p>Animal Science Cattle, horses, sheep, goats, hogs, poultry, and other domesticated animals are important to people for many reasons. They supply us with food and clothing, we use them for recreational purposes, they work with and for us. Maximum number of participants: 25 http://www.scouting.org/filestore/Merit_Badge_ReqandRes/Animal_Science.pdf Prerequisites: Requirement #7 NOTE: Instructor: Ron Snyder</p>
SUS125	9-12 PM		<p>Electricity Electricity is a powerful and fascinating force of nature. As early as 600 b.c., observers of the physical world suspected that electricity existed but did not have a name for it. In fact, real progress in unraveling the mystery of electricity has come only within the last 250 years. Maximum number of participants: 20 http://www.scouting.org/filestore/Merit_Badge_ReqandRes/Electricity.pdf Prerequisites: #2 NOTE: Instructor: Brad Deken</p>
SUS125	1-4 PM		<p>Electricity Electricity is a powerful and fascinating force of nature. As early as 600 b.c., observers of the physical world suspected that electricity existed but did not have a name for it. In fact, real progress in unraveling the mystery of electricity has come only within the last 250 years. Maximum number of participants: 20 http://www.scouting.org/filestore/Merit_Badge_ReqandRes/Electricity.pdf Prerequisites: #2 NOTE: Instructor: Brad Deken</p>
SUS128	9-12 PM		<p>American Business Earning the American Business merit badge can help Scouts learn practical business matters that will be useful throughout life. Learning how businesses function will help you understand society and uncover a number of career options. Maximum number of participants: 25 Prerequisites: 2 (a), 3, 5 (a) and (b) NOTE: Instructor: Theresa Scully</p>
SUS129	1-4 PM		<p>Chemistry 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: 25 Prerequisites: None NOTE: Instructor: Shannon Todd</p>
SUS133	1-4 PM		<p>Medicine 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 Be prepared to discuss 1, 2, 4, 5, and 6. NOTE: Instructor: David Smiley</p>

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| SUS139 | 1-4 PM |  | Environmental Science
While earning the Environmental Science merit badge, Scouts will get a taste of what it is like to be an environmental scientist, making observations and carrying out experiments to investigate the natural world.
Maximum number of participants: 25
Prerequisites: TBD
NOTE: Instructor: Leroy Schenimann |
| SUS140 | 1-4 PM |  | Welding
The new Welding badge and pamphlet was released by BSA, and Scouts could begin earning the badge on February 24, 2012.
Maximum number of participants: 15
Prerequisites: Wear long sleeve cotton shirt, long jeans (no workout style pants), and boots

NOTE: Instructor: Steven Ward |
| SUS141 | 9-12 PM |  | Family Life
The family is the basic unit of society and is important to both individuals and communities. The world is rapidly changing, making today's society much more complex than ever before. As Scouts earn this merit badge, they will realize why it is important to know more about family life and how to strengthen their families.
Maximum number of participants: 20
Prerequisites: 4, 5, and 6b
NOTE: Instructor: Michelle Melton |
| SUS141 | 1-4 PM |  | Family Life
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Maximum number of participants: 20
Prerequisites: 4, 5, and 6b
NOTE: Instructor: Michelle Melton |
| SUS142 | 9-12 PM |  | 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: 20
Prerequisites: Please use the following link to view the prerequisites and see what is expected of you for this class:

https://zcrewdiscuss.us/world%20citizen%20-%20prerequisites.pdf

Additionally, below is the link to the lesson plan that will be used in this course:

https://zcrewdiscuss.us/world%20citizen-lesson%20guide.pdf
NOTE: Instructor: David Epps |
| SUS142 | 1-4 PM |  | Citizenship in the World
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NOTE: Instructor: David Epps

SUS143 9-12 PM



Signs, Signals, and Codes

American Sign Language (ASL) is the third most used language in the United States. The Signs, Signals, and Codes merit badge will cover Morse code, ASL, Braille, signaling, trail markings, and other nonverbal communications. Did you know that some of these have even saved people's lives'

Maximum number of participants: 20

Prerequisites: 10

NOTE: Instructor: Trae Mitten

SUS144 1-4 PM



Geocaching

The word geocache is a combination of "geo," which means "earth," and "cache," which means "a hiding place." Geocaching describes a hiding place on planet Earth - a hiding place you can find using a GPS unit. A GPS (Global Positioning System) unit is an electronic tool that shows you where to go based on information it gets from satellites in space.

Maximum number of participants: 20

Prerequisites: Req: #7 - register on geocaching.com before camp. Bring smartphone with app or

GPSr to event. #9 - Bring sign verification from Scoutmaster/Parent

NOTE: Instructor: Trae Mitten

SUS145 9-12 PM



Plumbing

Plumbing, including pipe fitting, is an important and well-paid occupation. The industry is quite broad. It covers installations and repairs in homes, commercial properties, and factories. Plumbing pipelines are used for water supply, waste drainage, natural-gas heating, and many other purposes.

Maximum number of participants: 20

Prerequisites: #2 both a and b

NOTE: Instructors: Willie Sandin and Brian Sievers

SUS145 1-4 PM



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Stem Novas (Scheduled Classes)

STNO100 9-12 PM



Shoot!

This module is designed to help you explore how science affects your life each day.
Maximum number of participants: 25
Prerequisites: 1, 2

NOTE: Instructor: Noah Raines

STNO101 1-4 PM



Start Your Engines

Technology based Nova

This module is designed to help you explore how technology affects your life each day.
<http://www.scouting.org/stem/Awards/BoyScouts.aspx#start>
Maximum number of participants: 25
Prerequisites: 1,2

NOTE: Instructor: Mark Hopper

STNO102 9-12 PM



Whoosh!

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

Maximum number of participants: 20
Prerequisites: 1, 2, 4 a & b

NOTE: Instructor: Lynn Hasty

STNO104 9-12 PM



Let It Grow!

This module is designed to help you explore where your food comes from and how agriculture affects your life each day. Agriculture includes growing crops and raising animals to provide food and other products.

Maximum number of participants: 25
Prerequisites: 1, 2

NOTE: Instructor: Leroy Schenimann

STNO105 9-12 PM



Splash!

This module is designed to help you explore how water affects your life every day. Splash! is part of the Science category.

Maximum number of participants: 20
Prerequisites: 1, 2, 4

NOTE: Instructor: Christine Stewart