



Twin Rivers Council

Merit Badge College Guide

Saturday, March 15, 2025

Shaker High School
(445 Watervliet Shaker Rd, Latham, NY 12110)



Important Items to Note

Purpose of the Merit Badge College (the “MBC”): The intent of this program is to supplement your scout’s merit badge work with counselors in their troop, district, as well as at summer camp. Specifically, the MBC seeks to provide your scout an opportunity to meet with highly qualified professionals to learn and foster the development of lifelong interests, particularly for career and hobby-oriented merit badges.

Disclaimer: Earning a merit badge at the MBC is NOT guaranteed. No requirements will be “excused”; none will be “gifted”. Your scout MUST participate. Completion of assigned pre-requisites (“Pre-Reqs”, i.e. merit badge requirements that cannot be completed during the MBC) is essential to complete the merit badge. For scouts who are disappointed that they did not finish a merit badge at the MBC, please let them know that there is nothing wrong with partially completing a merit badge; your scout can finish the merit badge up until they are 18 years old.

Code of Conduct:

- the Scout Oath and Scout Law apply at all times.
- If your scout’s merit badge counselor determines that your scout is disruptive to a merit badge class, your scout may be asked to leave. No refunds will be given.
- The Twin Rivers Council, University of Scouting participants, and the MBC participants are guests of Shaker High School. Please leave it better than how you found it.
- Scouts should NOT be roaming the hallways.
- Please be respectful to both the MBC staff and its counselors; they are volunteering their time to support your scout’s advancement.

Prior to Arrival: To maximize their learning, your Scout should complete the following BEFORE the MBC:

- Secure the merit badge pamphlet(s) for your scout’s class(es) and then...
- ...have your Scout read the pamphlet(s)!! ☺
- Complete the pre-requisite requirements (refer to the Merit Badge PreReq list)
- Print the merit badge workbook from this site (<http://usscouts.org/mb/worksheets/list.asp>) and complete the specified prerequisites. Before printing, please confirm they have been updated, if applicable for any 2025 requirement updates (<https://www.scouting.org/skills/merit-badges/all/>)

Recording of Merit Badge Advancement: All advancement will be processed through Scoutbook. Prior to the MBC, please have your scout’s Unit Leader “Start Another Merit Badge” for your scout in Scoutbook, provide the “initial unit leader signature” and proceed to “Invite Counselor” for the identified merit badge counselor in the “Merit Badge Counselor Info” form. If the class is being co-taught by merit badge counselors, the unit leader can choose either one. If your scout’s unit does not use Scoutbook, please feel free to bring a cardstock blue card that is signed by your scout’s Unit Leader. Cardstock blue cards will NOT be provided at the MBC.

Items for your Scout to Bring to the MBC:

- Class A uniform – Scouts MUST be in their Class A uniform
- Snack from home
- Water bottle / something to drink
- Brown Bag lunch (if not purchasing the lunch option)
- Pen/pencil
- USScouts.org Merit Badge Worksheets with the completed pre-requisites for their class(es)
- Draw string bag or backpack to hold the above items

Cell Phones: Scouts may bring them BUT:

- It must be set to silent/vibrate during class
- A Scout is Courteous – unless instructed by the merit badge counselor for your scout to use their phone, your scout may NOT call/text/browse/play games/etc. during a class

Class Sessions:

- Morning (AM) = 8:00am-11:45am (includes opening ceremony and general session)
- Afternoon (PM) = 1:10pm – 4pm
- All Day
- Cub Scout Adventures 10am-noon

Pricing:

- In Council:
Credit / Debit Card = \$25.75
Bank Transfer / Check = \$25.00
- Out of Council:
Credit / Debit Card = \$36.05
Bank Transfer / Check = \$35.00
- Cub Scout Adventures \$15.00

Electronics MB class requires a soldering project kit, which will be provided in the class and costs an additional:

Credit / Debit Card = \$17.51
Bank Transfer / Check = \$17.00

First Aid Merit Badge Cost is \$23.00 for American Heart Association e-Card certification and pocket mask

Lunch Option- Lunch will be available to preorder at time of registration for an additional \$15.00. It will be a boxed lunch from Subway (includes sandwich or salad option, chips and cookie). If your scout does not preorder lunch, they must bring a bag lunch as there will be no food available to purchase on site!

Where does my Scout report upon arrival?

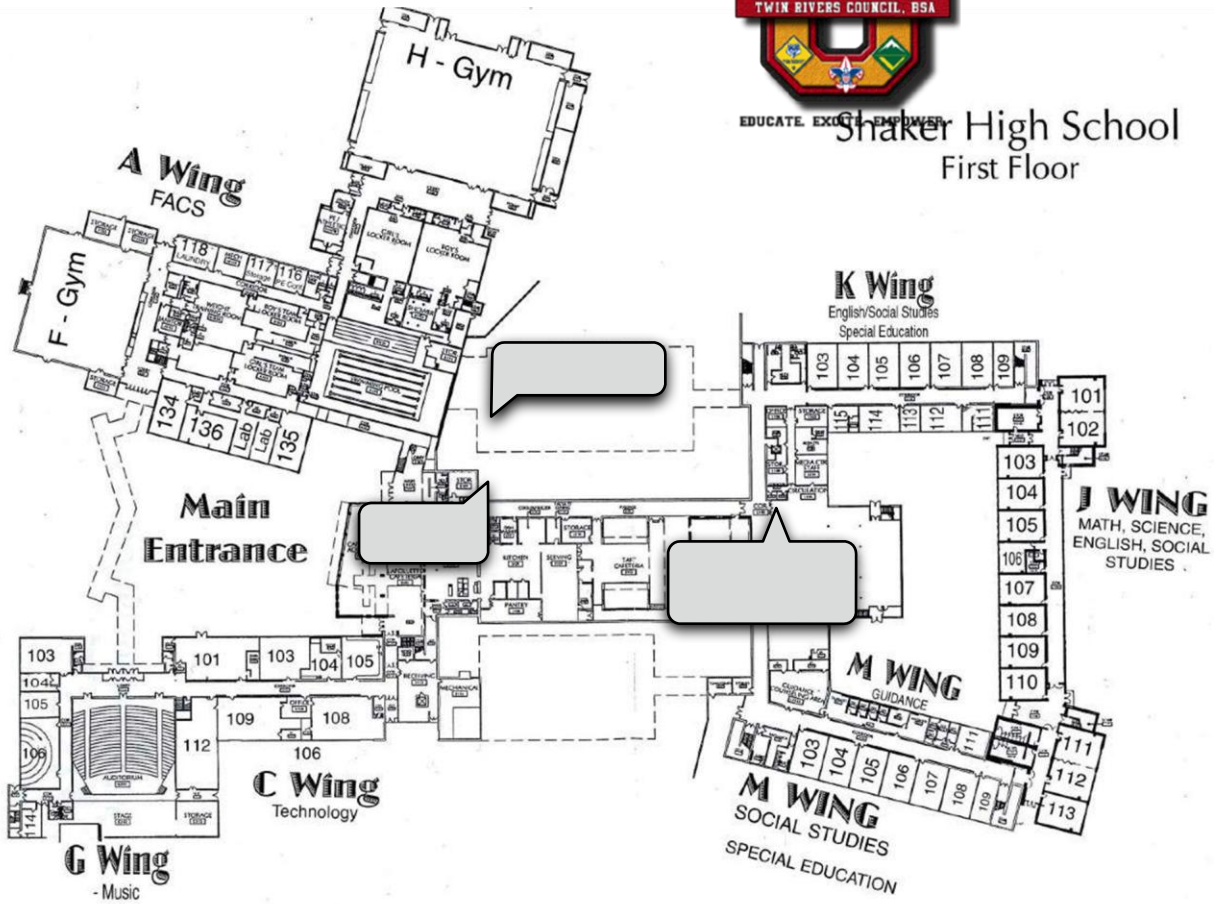
Please have your scout report to the check-in tables in front of the main cafeteria. Each Scout's packet will be on the tables in alphabetical order for them to pick up. Once the Scout has their packet, they will go to the main cafeteria for the opening ceremony at 8:00 am.

Scout packets will include:

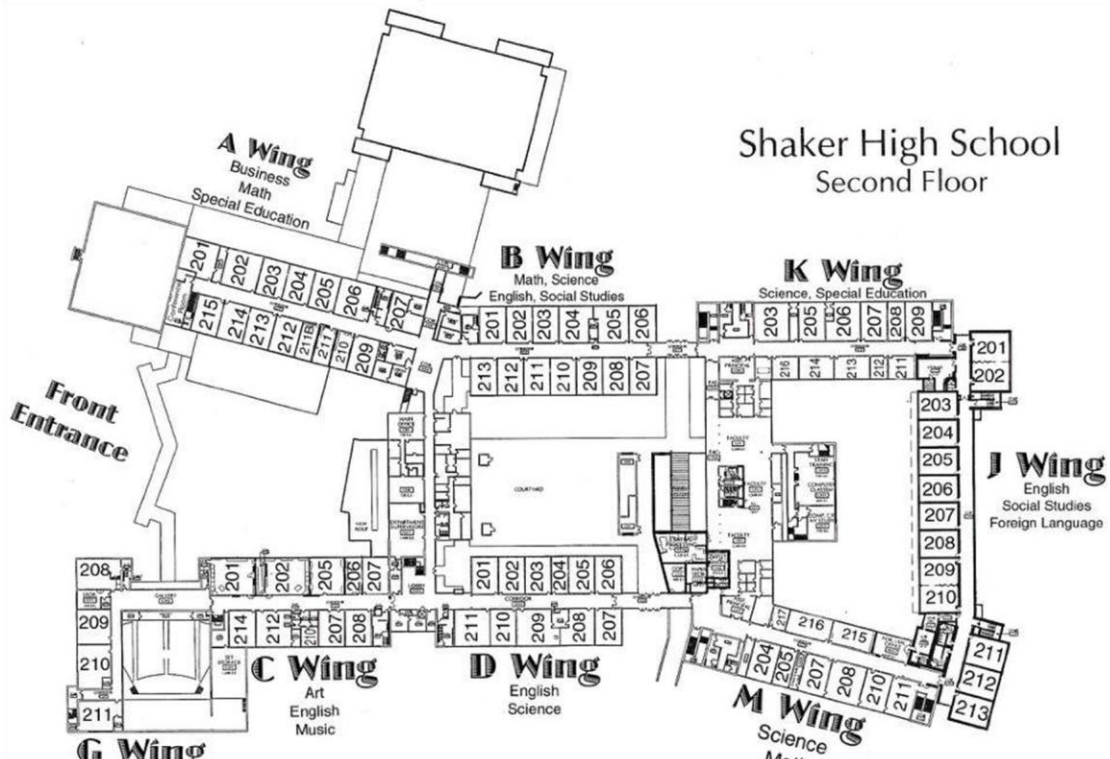
- A schedule for the day
- School map
- Patch
- lunch ticket (if this was purchased with the scout's registration)
- Program flyers for upcoming events



Shaker High School First Floor



Shaker High School Second Floor



Merit Badge Pre-Reqs

Merit Badge	Session	Classroom	Pre-Reqs
Art (Livingston)	AM		
Automotive Maintenance (Brown)	AM		
Automotive Maintenance (Ostwald)	AM		11a and 12. Please download the Automotive Maintenance form from the registration site.
Automotive Maintenance (Mossey)	PM		
Cit in the Nation (Burns)	AM		#1, #2, #3, #4, #5, #6, #7, and #8; bring a copy of the letter you wrote to a U.S. Representative or Senator); Scouts need to be ready to discuss and answer all questions to complete the badge that day. The badge requires prior preparation and the pamphlet.
Cit in the Nation (Durr)	AM		#1, #2, #3, #4, #5, #6, #7, and #8; bring a copy of the letter you wrote to a U.S. Representative or Senator); Scouts need to be ready to discuss and answer all questions to complete the badge that day. The badge requires prior preparation and the pamphlet.
Cit in the Nation (Tremper)	PM		#1, #2, #3, #4, #5, #6, #7, and #8; bring a copy of the letter you wrote to a U.S. Representative or Senator); Scouts need to be ready to discuss and answer all questions to complete the badge that day. The badge requires prior preparation and the pamphlet.
Cit in World (Dorsey)	AM		#7 (Pick 2 Options) Bring merit badge worksheet, which will be reviewed for completion.
Cit in World (Garry)	AM		#7 (Pick 2 Options) Bring merit badge worksheet, which will be reviewed for completion.

Merit Badge	Session	Classroom	Pre-Reqs
Cit in World (Durr)	PM		#1, #2, #3, #4, #5, #6, #7; Scouts must do research ahead of time. Answers are in the pamphlet. Fill in worksheet using merit badge pamphlet and be ready to discuss
Cit in World (Ragone)	PM		#1, #2, #3, #4, #5, #6, #7; Scouts must do research ahead of time. Answers are in the pamphlet. Fill in worksheet using merit badge pamphlet and be ready to discuss
Coin Collecting (Janeczko)	AM		#4 and #7, bring coin collecting worksheet printed off
Collections (Dorsey)	PM		
Communication (Autrey)	AM		All requirements need to be done ahead of time. Scouts should be prepared to present #3 and #4 and teach #6 to the class. Scouts should bring any materials needed for #6 with them. Scouts should bring the merit badge workbook with them completed to class.
Communication (Tremper)	AM		All requirements need to be done ahead of time. Scouts should be prepared to present #3 and #4 and teach #6 to the class. Scouts should bring any materials needed for #6 with them. Scouts should bring the merit badge workbook with them completed to class.
Disabilities Awareness	AM		Open Minds and Full Hearts

Merit Badge	Session	Classroom	Pre-Reqs
Electronics (Hassel)	AM		
Emergency Prep. (Rinckey)	AM		For #1 - bring evidence of completed First Aid Merit Badge (completed blue card or award card). For #2b - bring completed chart with all 10 emergency situations. For #3 - bring a written copy of your family plan. For #8b – be prepared to discuss. For #9b - bring written mobilization plan. #9d bring proof of service project completion (i.e. a letter from your Scout or Community Agency leader). For #9c - bring personal emergency service pack. For #10 - bring documentation showing completion of one option.
Emergency Prep. (Donnarumma)	PM		For #1 - bring evidence of completed First Aid Merit Badge (completed blue card or award card). For #2b - bring completed chart with all 10 emergency situations. For #3 - bring a written copy of your family plan. For #8b – be prepared to discuss. For #9b - bring written mobilization plan. #9d bring proof of service project completion (i.e. a letter from your Scout or Community Agency leader). For #9c - bring personal emergency service pack. For #10 - bring documentation showing completion of one option.
Engineering (D'Angelo)	AM		#1, #2 and #9
Engineering (Pattison)	PM		#1, #2 and #9
Entrepreneurship (Puleo)	AM		#4. laptop if available; pen and paper and list of pre-thought-out ideas for a business
Environmental Science (Toni)	All Day		

Merit Badge	Session	Classroom	Pre-Reqs
First Aid (Polimeri)	All Day		Cost: \$23 for American Heart Association e-Card Certification #5a & 5b For 5A please bring a first aid kit for home. For 5B please bring a troop first aid kit (if you can do so with your Scoutmaster's approval).
Forestry (Burns)	PM		#1 & #5; Notebook
Game Design (McWilliam)	AM		1. Requirement 1 - Use the following document to help with definitions needed - https://troopwebhost.blob.core.windows.net/troop1075delmar/game_design_2023123116181547133444.pdf 2. Requirement 2 - Remember - you need only work on 5 of the 17. We will use all the terms in discussions though 3. Requirement 3
Game Design (Zemsky)	PM		1. Requirement 1 - Use the following document to help with definitions needed - https://troopwebhost.blob.core.windows.net/troop1075delmar/game_design_2023123116181547133444.pdf 2. Requirement 2 - Remember - you need only work on 5 of the 17. We will use all the terms in discussions though 3. Requirement 3
Home Repairs (Waters)	All Day		#3 & #6; Minimum Age: 13 years old
Law (Stump)	All Day		Prerequisite: Mandatory attendance at an evening session at Albany Law School on Wednesday, March 5 from 5-7 p.m. is required to participate in this program. Participants will meet attorneys from a wide range of legal professions and receive assignments for a mock trial to be held during the Merit Badge College. Pizza will be available for \$1 a slice or please bring a snack to eat during break.

Merit Badge	Session	Classroom	Pre-Reqs
Programming (Jiang)	AM		#1 thru #4 and #6; Please bring a fully-charged laptop (NOT Chromebook) with Microsoft Windows 10 or 11 (NOT Mac laptop) and at least 10 GB free space on the hard drive. Please also bring your charger. We will introduce scouts to some open-source programming languages and systems such R, Python, and Quarto, which are widely used in statistical/machine learning and data science.
Programming (Jiang)	PM		#1 thru #4 and #6; Please bring a fully-charged laptop (NOT Chromebook) with Microsoft Windows 10 or 11 (NOT Mac laptop) and at least 10 GB free space on the hard drive. Please also bring your charger. We will introduce scouts to some open-source programming languages and systems such R, Python, and Quarto, which are widely used in statistical/machine learning and data science.
Public Health (Donnarumma)	AM		#5 & #7; For #5 - choose one and be prepared to discuss your experience, for #7 - choose one and be prepared to discuss.
Public Speaking (Thorpe & Sherman)	AM		Come prepared in advance to do: Requirement #2 (3–5-minute talk on topic of your choice with visual aids), #4 (8–10-minute conversational speech from prepared outline).
Radio (Collins)	AM		Choice of Requirements 9a or 9b or 9c
Rail Roding (Casey)	PM		
Scholarship (Roberts)	AM		1,2,3,5 (4 will be discussed in person); Any report cards/written reports required (printed please not electronic) 1. Bring Report Card 2. If doing 2A, bring a list to discuss/report about. If doing 2B, do interviews, type them up and bring

			<p>them. If doing 2C, bring planner filled out to show and discuss</p> <p>3. Do this and bring it printed out to discuss</p> <p>5. Pick one to do and bring a printed-out report to discuss</p>
Sustainability (Fenstermacher)	AM		#5b and #8a
Sustainability (Puleo)	PM		#5b and #8a

Merit Badge Counselor Information

Merit Badge	Counselor	Background
Art	Maureen Livingston	
Automobile Maintenance	Larry Brown	
Automobile Maintenance	Andrew Mossey	I am Mr. Mossey. I have been scouting for over 10 years. I am currently the Scoutmaster of Troop 77 in Colonie. I have been repairing machines for 28 years. I started at HVCC and received my degree in Automotive repair. I achieved ASE Master Mechanic status as well as Ford Certified Master Mechanic status. After over 10 years in the Automotive field, I started working on home appliances with Sears home services. I spent 11 years as a Master Technician working for the Whirlpool Corporation. I taught Technicians in the field how to work on appliances over the phone. I currently am working in the commercial appliance field and serve as a mentor for younger and less experienced Technicians. I specialize in teaching electronic diagnosis and repair.
Automobile Maintenance	Gavin Ostwald	Mr. Ostwald has been a mechanic for 5 years and has an Associates in automotive maintenance. He works on construction machinery with CAT and previously worked on a fleet of 30 vehicles from vans to box trucks. He has rebuilt engines, transmissions and learned quite a bit of diagnosis between electrical and mechanical.
Cit in the Nation	Michael Burns	A field forester for over 35 years, Graduated from SUNY ESF with Associates in Forest Technology, and a Bachelors in Forest Resource Management. Worked for the National Park Service, US Forest Service, American Forest Foundation, Empire State Forest Products Association, private family-owned sawmills, and as an independent consulting forester. Scoutmaster, Merit Badge Counselor for most Natural Resource badges, Mohawk District Committee Member, Twin River Council Conservation Committee Chair.

Merit Badge	Counselor	Background
Cit in the Nation	Eric Durr	Mr. Durr was a reporter for 20 years covering government. He minored in history in college and he was a serving Army officer in both the Active and Reserve components for 28 years. He currently works in government.
Cit in the Nation	Ron Tremper	
Cit in the World	Eric Durr	Mr. Durr served overseas in Germany for 6 years while assigned to the U.S. Army. He was a journalist for 20 years and a serving military officer, deploying overseas twice, for 28 years.
Cit in the World	Mark Dorsey	Mark currently serves as the Member Care Associate for Twin Rivers Council. He is an Eagle Scout, who earned the Eagle Scout Award with Troop 70 in Saratoga Springs. After finishing high school, he went to Syracuse University to get a Bachelor of Arts in History, concentrating on European History.
Cit in the World	Rose Ann Garry	
Cit in the World	Dan Ragone	
Coin Collecting	George Janeczko	George Janeczko is an avid Coin collector and has completed the numismatic course.
Collections	Mark Dorsey	Mark is an avid collector of sports memorabilia, focusing on baseball. An avid New York Mets fan, he has been to all 30 MLB baseball stadiums. He also has been at the past 3 Baseball Hall of Fame Induction weekends in Cooperstown, amassing an impressive collection of autographs from Hall of Famers.
Communication	Brenna Autrey	Ms. Autrey has been an English teacher at Guilderland High School for 22 years - teaching English 10, Sports Composition, and the Holocaust through Literature. She has been a merit badge counselor for Troop 1083 for many years for Communication, Swimming, Citizenship in Society, and Reading.
Communications	Ron Tremper	
Disabilities Awareness	Emily LaLone	

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Electronics	George Hassel	Mr. Hassel teaches physics at Siena College. He uses electronics in coursework and research projects. He really enjoys working with electronics projects and learning the troubleshooting skills needed.
Emergency Preparedness	Dr. Robert Donnarumma	<p>Dr. Robert Donnarumma is an Emergency Physician and Chief Medical Officer at Saratoga Hospital. He previously served as Chair of emergency medicine and Medical Director of the emergency department.</p> <p>Prior to joining Saratoga Hospital, Rob served as an EMT with Rural/Metro Ambulance Service, then as an EMT and crew chief with Cornell University EMS.</p> <p>Dr. Donnarumma holds a bachelor's degree from Cornell University, a doctor of medicine degree from New York Medical College, as well as a master of public health from New York Medical College with a concentration in health policy management. He is board certified in emergency medicine by the American Board of Emergency Medicine, as well as in healthcare management by the American College of Healthcare Executives.</p>
Emergency Preparedness	Greg Rinckey Esq.	<p>Mr. Rinckey graduated from Hofstra University with a BBA in Business Management and was also commissioned a 2LT in The United States Army in May 1995. Greg went on to Law School and while in College and Law School served as a Volunteer Firefighter/EMT in the East Meadow Fire Department.</p> <p>Greg served as an Army Judge Advocate (JAG) for 6 years on active duty and was Honorably discharged in June 2004. Greg is an avid outdoorsman, camper, and hiker.</p>
Engineering	Daniel D'Angelo	

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Engineering	Rob Pattison	Rob received his B.S. in Chemical Engineering with a Bioengineering Option from Cornell University, a M.S. in Chemical Engineering from Tufts University and an MBA from Northeastern University. For over five years, he worked in upstream process development at both Regeneron Pharmaceuticals as well as Genzyme Corporation (now part of Sanofi). Rob is a lead author for research published in Biotechnology Progress. In 2003, Rob started using his engineering skills in finance and presently serves as an Executive Director as well as Co-Head of Morgan Stanley's Public Sector Group.
Entrepreneurship	Chris Puleo	Chris is new associate professor at Rensselaer Polytechnic Institute in Troy, NY. Chris was originally a RPI graduate (Biomedical Engineering, '03) and received a PhD in Biomedical Engineering from Johns Hopkins Medical School in 2009. Chris' graduate work was in the BioMEMS lab of Jeff Wang and focused on combining microfluidics and single molecule imaging techniques for diagnostics. Since graduating, Chris has worked at General Electric's corporate research center on both private and government healthcare related projects. For the last 8 years at GE Chris has pioneered ultrasound-based neuromodulation therapies with his teams at GE, applying these new tools to combat chronic diseases (such as type 2 diabetes) in both pre-clinical and clinical trials. Chris is an inventor on 38 granted patents and has 40+ peer-reviewed publications. As a principal investigator, Chris has led GE, NIH, DTRA, DARPA, Navy/MTEC, and BARDA-funded teams and his ultrasound therapy team recently won the phase 1 and 2a NIH Neuromod prize.

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Environmental Science	Melissa Toni	Melissa has spent the last 15 years working as a biologist with the Federal Highway Administration's Headquarters. She specializes in leading the environmental aspects of large bridge construction projects in the Northeast, including the Francis Scott Key Bridge in Baltimore, the Cape Cod Bridges in Massachusetts, and the Tappan Zee in New York. Melissa enjoys working with endangered aquatic species including fish, mussels, marine mammals, and turtles, as well as bats and other terrestrial and avian species. Former positions have included a Park Ranger in Vermont, Wetland Biologist in Connecticut, and U.S. Army National Guard biology work for a few years after 9/11. Melissa is an Assistant Scoutmaster with Troop 1075 Delmar and loves working with younger scouts and leading high-adventure backpacking and canoe treks in the Adirondacks with older scouts. She lives in Sand Lake with her husband Andy and three kids, Matt (Eagle), Teddy (Life), and Bethany (Star).
Family Life	Bruce Wagner	
First Aid	Ethan Polimeni	Mr. Polimeni is an industrial firefighter/fire inspector for General Electric Vernova for the past 17 years. Before that he was a Rescue Lieutenant as a career firefighter for 9 years. He has served as a volunteer firefighter, and a volunteer for the local EMS-Ambulance service as well. He has college degrees in Emergency Management, Fire Protection, Paramedicine, Mechanical and Electrical Engineering. He is pursuing his Master's in Homeland Security and Emergency Management. He is a NYS and National Fire Academy certified fire instructor, and an American Heart Association CPR/AED/FIRST-AID Instructor. Ethan has over 27 years total experience serving the career and volunteer side in fire, haz-mat, search & rescue, technical rescue, and EMS. Ethan likes camping, hunting, fishing, shooting, gardening and canning, and volunteering in his spare time. He is an Eagle Scout as well, 1997.

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Forestry	Michael Burns	A field forester for over 35 years, Graduated from SUNY ESF with Associates in Forest Technology and a Bachelors in Forest Resource Management. Worked for the National Park Service, US Forest Service, American Forest Foundation, Empire State Forest Products Association, private family-owned sawmills, and as an independent consulting forester. Scoutmaster, Merit Badge Counselor for most Natural Resource badges, Mohawk District Committee Member, Twin River Council Conservation Committee Chair.
Game Design	Jeff Zemsky	Jeff is a mechanical engineer with background in product design including consumer, industrial and power generation products. Today he leads software teams for tools that are used globally to design and manage product development and manufacturing. In addition to Scouting, he supports a local STEM center teaching CAD to kids. His hobbies exercise his engineering background including woodworking, making, 3D printing and working on bicycles.
Game Design	Josh McWilliam	
Home Repairs	Tom Waters	After high school, Mr. Waters completed a four-year apprenticeship in carpentry which led to a career installing laboratories. The equipment they installed included plumbing and electrical components which Mr. Waters had to be very familiar with. His job took him all over New York State. When his son was born, he could no longer travel for long periods of time so now he is the maintenance director for a large childcare company with multiple locations.
Law	Stacey Stump	Stacey Stump attended Hamilton College and Albany Law School and was admitted to the New York State bar in 2008. She has worked for both the legislature and the executive branches of the New York State government. Ms. Stump practices administrative law and has vast experience in drafting regulations and statutes. She is the mother of two scouts and serves on the committee for Troop 1011 in Albany.
Programming	Dr. Shiguo Jiang	Dr. Jiang is an Associate Professor in the Department of Geography and Planning, SUNY Albany. He conducts teaching and research in geospatial big data with artificial intelligence (GeoAI).

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Public Health	Dr. Robert Donnarumma	<p>Dr. Robert Donnarumma is an Emergency Physician and Chief Medical Officer at Saratoga Hospital. He previously served as Chair of emergency medicine and Medical Director of the emergency department.</p> <p>Prior to joining Saratoga Hospital, Rob served as an EMT with Rural/Metro Ambulance Service, then as an EMT and crew chief with Cornell University EMS.</p> <p>Dr. Donnarumma holds a bachelor's degree from Cornell University, a doctor of medicine degree from New York Medical College, as well as a master of public health from New York Medical College with a concentration in health policy management. He is board certified in emergency medicine by the American Board of Emergency Medicine, as well as in healthcare management by the American College of Healthcare Executives.</p>
Public Speaking	Renee Thorpe & Alicia Sherman	
Radio	Norm Collins	<p>Norm Collins' interest in amateur radio started at the age of 15. Norm has been a licensed FCC amateur radio operator for over 50 years. Norm holds an extra class license which carries advanced operating privileges. He has a fully functional station and has worked over 300 countries and islands throughout the world along with many awards. "Ham" radio lets you enjoy life-long friends and a hands-on technical experience. It also allows for emergency communication when the internet and cell phones are down. Interested scouts will be able to talk around the world to others.</p>
Rail Roding	George Casey	<p>Mr. Casey has been an avid model railroader since his time as a youth in scouting. He also is a rail fan who has been interested in rail operations for 40 plus years. He is an Eagle Scout and serves as an assistant Scoutmaster in the troop in his community.</p>

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Scholarship	Holly Roberts	My name is Holly Roberts. I have grown up actively involved in Girl Scouts having received my Gold Award. I have been active with Scouts BSA for about eight years since our son joined. I love camping and being outdoors. I am a merit badge counselor for Scholarship, Reading and Collections. I love meeting new Scouts and learning about their hobbies and interests through merit badges. I am a preschool teacher and have many hobbies including puzzles, Where's George, and diamond painting.
Sustainability	Susan Fenstermacher	
Sustainability	Chris Puleo	Chris is new associate professor at Rensselaer Polytechnic Institute in Troy, NY. Chris was originally a RPI graduate (Biomedical Engineering, '03) and received a PhD in Biomedical Engineering from Johns Hopkins Medical School in 2009. Chris' graduate work was in the BioMEMS lab of Jeff Wang and focused on combining microfluidics and single molecule imaging techniques for diagnostics. Since graduating, Chris has worked at General Electric's corporate research center on both private and government healthcare related projects. For the last 8 years at GE Chris has pioneered ultrasound-based neuromodulation therapies with his teams at GE, applying these new tools to combat chronic diseases (such as type 2 diabetes) in both pre-clinical and clinical trials. Chris is an inventor on 38 granted patents and has 40+ peer-reviewed publications. As a principal investigator, Chris has led GE, NIH, DTRA, DARPA, Navy/MTEC, and BARDA-funded teams and his ultrasound therapy team recently won the phase 1 and 2a NIH Neuromod prize.