

AIPG STUDENT CHAPTER REPORT 2024-2025:

WESTERN MICHIGAN UNIVERSITY

The Western Michigan University Student Chapter of the American Institute of Professional Geologists is proud to report a plethora of activities and successes throughout the past academic year of Fall 2024-Spring 2025.

AIPG Student Chapter Name: Western Michigan University Geology Club

Faculty Sponsor Name: Thomas R Howe

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2024/2025 Student Chapter Officers:

President: Donovan S Vitale

Vice President: Jordyn L Gibbs

Secretary: Mina R Bohl

Treasurer: Tori A Brown

WSA Representative: Rhys Campbell

2025/2026 Student Chapter Officer Nominees:

President: Erin E Hunter

Vice President: Moira A Burns

Secretary: Jordyn L Gibbs

Treasurer: Tori A Brown

WSA Representative: Max K Copus

Number of Members

Western Michigan University's AIPG student chapter is currently 25 registered members strong with an additional 20 members who have expressed interest but have not yet registered with AIPG. We are always actively working to recruit new members into geosciences.

Meetings Per Year

Chapter meetings are held weekly in Rood Hall Room 1192 (Figure 1). At meetings, members are informed of the club's goals and objectives in both the short and long term. Formal meeting minutes are taken by the chapter's secretary and the past week's minutes are approved or modified. The treasurer, secretary, and each standing committee report all updates. For the 2024/25 academic year, the WMU AIPG Student Chapter has conducted 21 documented formal meetings and dozens of informal meetings discussing club activities, club finances, and spring trip details.

A particularly important part of our weekly meetings are committee reports. To most effectively carry out club business, five committees have been established. The Educational Outreach Committee oversees creating events that get the youth excited about geological sciences. The Field Trip Committee oversees planning small trips throughout the year as well as our big end of the year trip. The Fundraising Committee oversees coming up with creative and novel ways for the club to raise funds. The Marketing and Communications Committee oversees advertising upcoming events and maintaining contact with our network of alumni. The Program Committee oversees planning and carrying out both fun and educational events.

Programs to Recruit New Members

Bronco Bash is WMU's annual welcome-back festival to assist students in transitioning back to campus life. Over 450 booths participate each year with an estimated 17,000 students, staff, and community members attending. This year the Geology Club partnered with the Office of Student Engagement to host a gem sleuthing activity in our department's rock garden (Figure 2 and 3)! The activity allowed students to pick out a bag of paydirt and then use a sluice box to find rock and gem treasure! The activity was accompanied by our usual booth which featured geology-themed games and a prize wheel (Figure 4). Students loved the event and it was great to see many new faces from Bronco Bash show up at our first meeting of the year.

Future Bronco Days provide an accessible way for admitted students and their families to experience all the university has to offer. Events at the program feature touring classrooms/labs, residence halls, and the campus in general. Students also can speak with faculty and explore student organizations. The WMU AIPG student chapter has tabled at every possible Future Bronco Day and plans to continue attending them in the future.

Student Center Involvement: This year, the WMU geology club earned office space in the Student Organization Center (SOC). The SOC is a central hub for all registered student organizations (RSOs) on campus. Having an office this year allowed us to really show off the club's personality. We decorated the space, hosted fun events, and advertised upcoming events.

Throughout the year, various students have approached us at our sales to compliment us on our office space and inquire about upcoming club events.

To increase our campus presence, the WMU AIPG Student Chapter participated in the Fall and Spring **Mental Health Fair**. The Mental Health Fair, drawing in more than 500 attendees, was a campus event aimed at equipping students with resources to enhance mental well-being and fostering connections with various RSOs, thereby nurturing a sense of belonging and mental wellness among attendees.

More focused recruitment is also carried out within the WMU Geological and Environmental Sciences Department. Club members attended student orientations in both the Fall and Spring semesters to speak about what the club does and recruit new undergraduate and graduate students. Additionally, we have made targeted visits to the Intro to Physical Geology classes (the class with the highest number of prospective members) to share what the club is up to and recruit new members. We also performed a much-needed update on our department display case! The updated display case provides students with updated, accurate information regarding club events and accomplishments.

All the events and more programmatic activities can be seen through the Chapter's **Experience WMU** webpage, Facebook, Snapchat, Instagram, and TikTok. The Experience WMU webpage features our list of officers, advisor information, constitution bylaws, images from past events and trips, and more. The page also includes a list of all events hosted by the chapter where students can browse and RSVP. Through this webpage, the chapter can track who is attending events and how much engagement is to be expected for each programmatic activity.

Activities in The Geosciences Department

While the Student Chapter hosts events independent of the WMU Geology Department, we understand that an organization best functions alongside and in stride with its own. Through our strong connection with our staff and faculty, the WMU AIPG Student Chapter is not only able to host but also attend many departmental events. Some events we have attended are as follows:

The WMU AIPG Student Chapter started the year strong with a trip to **Pilgrim Haven** (Figure 5). Pilgrim Haven is a secluded rock hounding spot located on the coast of Lake Michigan. The spot is known for its high amount of lightning stones (siderite matrix with small veins of calcite). Over 20 student members attended this trip, and it was a great opportunity for students to bond and enjoy local Michigan geology!

In October of 2024, the club helped host the annual **Geological and Environmental Sciences Department Alumni Event** at Revel and Roll West in Kalamazoo, Michigan (Figure 6). At this event, proud alumni from across the United States travel back to Kalamazoo for the purpose of celebrating the WMU Geology Department's anniversary. Fundraising for our student chapter and the Dr. Richard Passero Endowment for Geosciences takes place every year at this event.

Another one of our most successful events was our **Friendsgiving party and Ping-Pong tournament** which is fondly reflected on by our members (Figure 7). The chapter decided to have this event in celebration of Thanksgiving, a holiday about surrounding oneself with those

they are thankful for. Members were able to see the importance of getting to know each other outside of class and valued our time together in a relaxed off-campus environment. This event featured a potluck-style dinner, white elephant gift exchange, and a friendly ping-pong competition between members with the incentive of having their team's name engraved onto a real Geology Club legacy trophy.

Other successful events included a pumpkin painting night and jewelry making night where students from the department came together to participate in fun, stress-relieving events. These events serve to increase community within the club and department.

In April, the club is looking forward to participating in the Department's annual Spring Geoboree. This event serves as the spring counterpart to the fall alumni event and focuses on elevating student success and preparedness. This year, the Spring Geoboree will consist of a job fair, speed interviewing activity with our alumni attendees, and a student research symposium. Club members are looking forward to helping run and participating in this event.

The student chapter frequently addresses WMU Geology Departmental meetings, where officers present information about our chapter to faculty and both majoring and non-majoring students in Geoscience. These lunchtime gatherings provide the club with a chance to update the department's faculty and staff on our accomplishments thus far and our future plans and goals.

Fundraising

The WMU AIPG Student Chapter has had a very productive fundraising year. By utilizing proven fundraising methods alongside creative new methods, we have raised over \$22,000. At the beginning of the year, the club set out to achieve a goal that has never been accomplished in club history. Alongside fundraising for our end of the year trip, we wanted to raise money to begin a club endowment. The idea behind starting an endowment is that we wanted to create a lasting impact for future generations of the club. By establishing an endowment, future geology club students would have access to yearly interest that the endowment generates. Future generations of the club will have the freedom to put funds towards whatever they deem necessary; examples include scholarships, club supplies, geologic activities, etcetera. To begin an endowment at WMU, we need to raise \$30,000. This is a task too substantial for one year, but we have developed a three-year plan (raising \$10,000 each year to make this happen). Currently we have raised enough money to fund our end of year trip and meet our yearly endowment goal of raising \$10,000!

One of our most regular fundraising activities is **Rock sales** (Figure 8). Rock sales include selling rocks, club merchandise, and handmade jewelry. This year, we have hosted over 18 rock sales and although some have been more profitable than others, they have all been successful.

The club has had special success by organizing holiday-specific sales. During the Christmas season, we created some Christmas themed pet rocks. During Valentines Day, we sold heart shaped rocks and collaborated with the WMU Petry Society. During St. Patrick's Day, we organized a doubloon hunt where metal coins were hidden all over campus. Students that found these coins could bring them to our sale to claim prizes and enter a raffle. The coins served as a great secondary mechanism to bring in students! During Easter, we will host our annual Easter Egg hunt where we will hide easter eggs filled with rocks and candy around campus. The eggs

also include coupons that allow egg finders to redeem prizes and discounts at our associated Easter Rock Sale.

Another key rock sale for the club is the Kalamazoo Gem and Mineral Society annual tailgate. This is a cool annual event where geologists from all over the region come to sell rocks and minerals they've collected. For the club, this is a great opportunity to network with geologists outside of the academia realm.

For the second time, the WMU AIPG Student Chapter participated in the **Christmas at Wings Art & Crafts Show**. This is a massive, annual arts and crafts show which takes place in the K-Wings hockey stadium. The event hosts over 200 prized booths and we were lucky enough to have a spot. The two-day event brought in thousands of customers and served as a great way to raise funds and establish our presence in the Kalamazoo community. We raised over \$600 at this event and have signed up for another spot next year.

The proceeds generated from fundraising events are allocated directly to educational outreach initiatives, the club endowment, and our end-of-year trip. This year, our destination is the Desert Southwest (more details to follow)!

Activities at Western Michigan University

In October, the student chapter hosted a **Geoloween Havoc Concert** (Figure 9A and 9B)! This punk rock concert hosted three local bands in the Student Center. Besides rocking music, the event had themed cookies, a costume contest, and was attended by over 125 students. Alongside the Halloween concert, the student chapter hosted their annual **Haunted House** in the basement of our department building, Rood Hall. The haunted house was geology-themed and required the participants to collect clues and solve a geology riddle to receive free candy from our "mad geologist" advisor at the end.

Utilizing the lapidary equipment we acquired last year, (two cab kings, a 10-inch rock saw, slanted rock grinder, buffing wheel, and other accompanying equipment), we have hosted 5 **lapidary events** that have stirred up lasting excitement on campus (Figure 10). Event participants learn to use lapidary equipment to polish raw stones and turn them into beautiful, one of a kind, pieces of jewelry. The club has also greatly benefitted from this lapidary equipment as we have been able to make a plethora of hand-made products to sell.

Activities in Our Community

This year, the AIPG Student Chapter of Western Michigan University has continued to build upon our **educational outreach program**. Knowing geology is heavily based on experiential learning and collaboration, we believe educational outreach serves to introduce and inspire a new and diverse generation of future geologists.

So far, we have done events with the Boy Scouts of America, Comstock Elementary School, Red Cedar Nature School and Science Olympiad. Our educational efforts have reached over 200 K-12 students this academic year alone, with several more events on the books.

One of our biggest educational outreach events this year involved working with local boy scouts to help them earn their Geology Merit Badge. Usually meeting all the requirements to acquire the geology merit badge may take days or weeks to complete. With careful preparation and consideration from the WMU geology club, boy scouts were able to meet all their requirements in a single day! Boy scouts were introduced to geologic theory and hands on activities to learn about mineralogy, geologic mapping, sedimentology, stratigraphy, morphology, and water quality. A highlight activity for the scouts was reconstructing the Michigan Basin using only geologic maps. Scouts were each given a piece of a stratigraphic Michigan basin map. Using geologic theory related to steno's principles, strike, and dip, each scout constructed a cross-section view of their map section. When everyone was complete, the maps were placed together, and cross sections drawn in the same direction painted a clear picture of Michigan Basin Stratigraphy (Figure 11). Scouts left the day with their geology merit badge, a strong understanding of various geologic concepts, and an understanding of potential career paths for geologists.

In the fall, one of our student members was a student teacher for a third-grade classroom. The class was learning about how past events shaped current landforms. Recognizing there was the potential to host a meaningful educational outreach event, the WMU geology club developed a lesson pertaining to glacial geomorphology. The lesson involved an instructional PowerPoint, and a hands-on activity. The PowerPoint taught students about how glaciers formed and their important role in shaping the Great Lakes region. The hands-on activity included moving mini glaciers (ice cubes with various sediments inside) across various landscapes (playdough on paper plates). As students moved the glaciers across landscapes, they began to understand how glacial moraines and kettle lakes formed. Students also observed what happened as a glacier began to melt and the sedimentary features (glacial outwash/till) that are left behind.

In the spring, the club hosted Red Cedar Nature School to learn about some key mineralogy concepts. Students ranged from the age of three to nine, so care and consideration needed to be taken when planning lessons that young children could understand. Ultimately, we conducted a simple physical geology lab related to mineral properties and mineral identification. The event was framed as if students were detectives trying to solve the mystery of "what mineral is this?!" Students really enjoyed identifying various properties of their rock like streak, hardness, magnetism and color. By the end of the event, all students had successfully identified their mysterious mineral specimen!

Another successful community outreach event that the Student Chapter participated in was organizing and supervising the Fossils, events for the **Regional Science Olympiad Competition**. The Fossils event tested the students' ability to identify various fossilized organisms and their methods of fossilization. This event took place on March 15th on WMU's main campus and included more than 45 middle schools and high schools in the region.

Upcoming educational outreach events include Bronco Buddies and Comstock Stem Night. Bronco Buddies involves high school students from the Kalamazoo region visiting WMU to learn more about the programs offered at WMU. The geology club will be hosting hands-on geology activities to get these students excited about geology! Comstock STEM Night is an annual event hosted by the local Comstock school district. The event includes various hands-on

activities for students interested in Science, Technology, Engineering and Math. The WMU Geology Club will be adding to this event by running geology activities related to key hydrologic concepts.

Interactions with Professional Geologists and AIPG

At the beginning of the year, we were fortunate enough to have AIPG's support in sending Donovan Vitale (President) to the 2024 AIPG National Conference in Durango, Colorado. The conference was a great opportunity for Donovan to network with AIPG members, learn about the geologic industry outside of academia, and attend various conference field trips.

During December, the WMU Geology Club had five student members attend the annual AIPG Michigan Meeting. Here four of the five students participated in the annual poster contest (Figure 12). Donovan Vitale took first place in the graduate category with his poster on using Surface Water Foams as a PFAS Sampling Matrix in Natural Environments.

The AIPG ECP meetings have also served as an invaluable opportunity for gaining insight into the professional community and networking with other student chapters. We have attended all the AIPG ECP meetings this year and we greatly value the time and effort that Garrett Link puts into organizing meetings, conveying upcoming opportunities, and general support.

To further gain industry insights and enhance networking, we have hosted two guest speakers. Alumni mentorship program coordinator Paul Goudreault talked to us about owning your career and how to successfully navigate your work-life partnership, Cindy Whittum from EGLE talked about the EGLE application process and provided key insights into the environmental job market. Each speaker served as an opportunity to build valuable, professional connections and gain a better understanding of what a career in the geosciences may look like.

To help students practice their presentational skills, we also had our graduate students present on their current research (Figure 13). Research presentation varied widely from environmental geochemistry to oil and gas prospects, to drone-based geophysics. The presentations allowed undergraduate student members the opportunity to learn more about what conducting research looked like and graduate students solicited feedback on how they presented their research to unfamiliar audiences.

End of Year Trips

A real highlight of the club's efforts came to fruition over the summer when we took a once-in-a-lifetime opportunity trip to Chile (Figures 14-16)! Eleven students and two advisors attended the trip where we experienced Chilean culture, beautiful oceanic coasts, dunes, geysers, and amazing geologic folding. For each day of the trip, students oversaw researching the events and geologic locations of the day to instruct other students.

This year, the WMU AIPG student Chapter has been working hard to plan, fundraise, and execute another once-in-a-lifetime opportunity trip. This time, we are going to Utah! The trip is set for May where we will be spending time exploring Bryce Canyon, Zion, and Arches National

Parks. Student participants have once again chosen an educational specialty that they oversee creating a guidebook and teaching the rest of the group about during our trip.

Closing Remarks

The WMU AIPG Student Chapter has had one of their most ambitious and productive years to date. This report is evidence of our organization's commitment to spreading geologic knowledge, excitement and connections within our community, department, and campus. Our chapter is ever-expanding and vigilantly looking for opportunities to increase participation and love for the geologic sciences. The WMU AIPG student chapter is proud to be a part of AIPG and grateful for the opportunities provided by the association.

Respectfully submitted by,
The Western Michigan University AIPG Student Chapter