STUDENT PLAYBOOK

The 2025-2026 Bronco Challenge for Sustainable Impact

https://wmich.edu/sustainability/bronco-challenge

THE BRONCO CHALLENGE HAS BEEN MADE POSSIBLE BY SUPPORT FROM THE FOLLOWING SPONSORS



























August 28, 2025



TABLE OF CONTENTS

INTRO	DDUCTION 1
	What is the Bronco Challenge?
DESIF	RED RESULTS
	What We Are Looking For
AIDS	IN FORMING OR JOINING TEAM5
	Business Bash, September 18,2025
CHAL	LENGE DELIVERABLES7
	Phase 1- Team Formation and Proposal Submission
TERM	IS AND CONDITIONS10
	Eligibility

STUDENT PLAYBOOK

The 2023-24 Bronco Challenge for Sustainable Impact

August 28, 2025

INTRODUCTION

What is the Bronco Challenge?

The Bronco Challenge for Sustainable Impact, launched in 2022-2023, is a co-curricular, experience-driven, team-based, idea-focused competition to solve a sustainability problem. Full-time students, from freshmen through graduate students, work in four-person, interdisciplinary teams of their own choosing to solve a problem which they select. Their specific charge is to develop and vet a bold, transformative idea for a product, a business, a service or a public policy that solves a global problem or issue embedded in the UN Sustainable Development Goals (SDGs); as applicable solutions should also address potential social impacts such as diversity, equity and inclusion (DEI). As a co-curricular program, the Challenge opens the door for students to work on a problem that aligns with their passion. As a guardrail against wandering into unproductive territory, each team is strongly recommended to engage as a project mentor someone knowledgeable about the problem they have chosen to solve. Mentors can be family members, neighbors, faculty, professionals met through internships, etc.

Another co-curricular aspect of the Challenge is that students who win the competition receive prizes, not grades. Prize money is raised from sponsors whose strategic priorities for philanthropic investments include sustainability and education which are the essence of the Bronco Challenge; funding is also provided by Western. The sponsorship fees, which are committed on an annual basis, are \$5,000. Sponsors will have the opportunity to interact with students by serving as mentors or judges and in various project-specific roles, as needed. This provides sponsors with an early look at potential candidates for internships and employment.

In 2023, the Challenge brought international recognition to WMU for innovation in sustainability education from the Association for Advancement of Sustainability in Higher Education.

Unless prescribed as a course requirement, there will be no academic credit for participating in the Challenge.

.

What is Sustainability?

Sustainability has many definitions, but all relate to the 1987 book <u>Our Common Future</u> which concluded that global patterns of using non-renewable resources and working at cross purposes against nature set the stage for the demise of civilization as we know it. The prescription for avoiding that consequence is pivoting to a world more responsible in the use of resources and more symbiotic with nature. The proposed pathway is a world growth scenario that "meets the needs of the present without compromising the ability of future generations to meet their own needs." Those few words are a very tall order in that they call for a bold transformation of global, interconnected, social, environmental and economic systems and that they are intended to apply in perpetuity.

WMU students have grasped the urgency of the needed transformations and are looking for opportunities within their academic programs to be actively involved. Because most organizations in which students will seek employment have sustainability as a strategic priority, participation in the Challenge will strengthen one's resume.

To organize discussion and work pertaining to sustainability the UN published in 2015 goals and associated targets for achievement by 2030. These goals and targets are the previously referenced SDGs and are grouped in 17 topical areas as follows:

No Poverty
Zero Hunger
Good Health & Well Being
Quality Education
Gender Equality
Clean Water and Sanitation
Available and Clean Energy
Decent Work and Economic Growth
Industry, Innovation and Infrastructure

Reduced Inequality
Sustainable Cities and Communities
Responsible Consumption and Production
Climate Action
Life Below Water
Life on Land
Peace, Justice and Strong Institutions
Partnerships to Achieve the Goals

In each of these 17 topical areas, detailed goals and targets are provided which constitute the scope within which Challenge projects must be designed (https://sdgs.un.org/sites/default/files/2020-09/SDG%20Resource%20Document_Targets%20Overview.pdf). Challenge projects should also include DEI issues that may be embedded in the SDGs associated with a given project.

Why the Challenge?

WMU strives to prepare students to be leaders in their life's work and to be responsible citizens at large. However, when it comes to matters of sustainability, a complicating factor is that academic structures such as majors, minors, departments, etc., and associated academic rules, often work against students' efforts to gain an inter-disciplinary and cross-functional component of their education.

A student might major in economics and perhaps do a minor in psychology, and maybe even a second minor in geography, but adding ingredients about business or politics, for example, is typically beyond reach in four years. However, such diversity in one's education is valuable when trying to solve sustainability problems that by their very nature span broad circumstances. Critical issues embedded in the SDGs such as climate change, waste management, and public health are not recent developments and do not persist for lack of work by dedicated people and institutions. They persist because they are difficult to solve. To convey associated difficulties and solution barriers they have been labelled "wicked problems". Literature exists on the nature of wicked problems and why they are difficult to solve. Often

cited is the failure of problem solvers to view their work through a sufficiently diverse lens of expertise and a tendency to make convenient but wrong assumptions regarding the ease of implementing solutions.

The Challenge offers WMU students the unique opportunity to work with a team of peers on a complex problem and hopefully develop a solution that will advance world progress. An additional consideration is that many recruiters visiting campus have expressed interest in students' knowledge and problem-solving experience with sustainability matters, regardless of their major.

Connecting with Signature and SPURS Programs

Participation in the Bronco Challenge can be applied toward both WMU's Signature and SPuRS cocurricular programs, helping students earn credentials that strengthen and demonstrate their career readiness.

These programs guide students through meaningful co-curricular learning experiences that build skills and knowledge beyond the classroom.

For more information or to connect directly, students can contact the appropriate program lead:

- WMU Signature (all students): https://wmich.edu/signature
- SPuRS (Haworth College of Business students): Danielle Field at hcob-spurs@wmich.edu

How Does the Challenge Work?

Eligibility

The Challenge is open to all full-time students in all majors from freshman to post-graduate status.

To participate in the Challenge students must

- Work in self-selected teams that contain 4 students who collectively represent expertise in at least two, and desirably three, disciplines.
- Plan to be enrolled full time for both Fall and Spring semesters

Prize Money

The prize money referenced previously will be distributed as follows:

First Place Team: \$ 10,000 Second Place Team: \$ 6,000 Third Place Team: \$ 3,000

Team members that receive awards will share awards equally and the funds may be used for any purpose.

Feedback and Evaluation

Winners of the Challenge will be determined by a panel of judges consisting of WMU faculty and external subject matter experts. Their determination will be based on a review of final reports and oral presentations by teams that qualify as finalists according to a three-phase process as described below.

Because deliverables will be seen by judges and others outside WMU it is important that written documents and oral presentations embody a strong professional look and feel. As applicable, students will

receive feedback on the quality of written and oral deliverables which will determine at the end of each phase whether a team will proceed to the next phase. Feedback on the technical content of the work will be provided by Dr. Drobny. Feedback on the structure and impact of written reports and oral presentations will be provided by Dr. Beth Ernst and Ms. Shauna Waltmire of the Haworth College of Business Communications Center (Comm Center).

Schedule for the Challenge

The Challenge is organized in three Phases.

Phase 1

Phase 1 entails formation of project teams, creation of a project proposal and begins with the start of the 2025 Fall semester. The opportunity to participate in the Challenge will be promoted to students through many communication channels including social media, print material, in-class announcements, student organizations and information meetings. Project proposals will be due November 13, 2025. Project teams will be notified by November 18, 2025, if their project is accepted or not.

During the period November 20-25 at least 2 members of each team will meet for 30 minutes to review the team's plans for kicking off their project. These meetings will be held in the Lobby of Schneider Hall. Teams shall arrange with Dr. Drobny the date and time for their meetings.

Phase 2

Phase 2 entails an oral progress with <u>each member</u> of every team meeting in-person for up to one hour with Dr. Drobny and a Comm Center representative for an oral progress report, to include a 10-minbue Power Point presentation and follow up Q&A. It is the responsibility of teams to take the initiative to set up these meetings that shall occur during the period February 2-11, 2026.

On November 13, teams judged to be competitive in Phase 3 will be notified, as will any teams judged not to be competitive.

Phase 3

Phase 3 entails the final competition. Teams will submit final reports on March 18, 2026. No later than March 23, 2026 teams selected (maximum of 5) to make presentations to judges on April 3, 2026 (in the morning) will be notified.

Immediately after the presentations on April 3.2026 the judges will meet to combine their evaluations of the competing teams, the winners will be announced, and attendees will be invited to have lunch.

Planning Ahead

If you think your Bronco Challenge idea may have commercial potential, you should explore the resources available from <u>Western's Starting Gate</u>.

Starting Gate is a business accelerator program at Western Michigan University in the Haworth College of Business. Starting Gate provides a supportive environment for students to explore their business concepts, assess feasibility, and develop comprehensive operations, marketing, and financial plans. Through mentorship opportunities with experts from Western Michigan University and the local community, members gain valuable insights and connections to help turn their ideas into successful ventures, including funding options.

DESIRED RESULTS

The end result of a Challenge project may be an idea for a product, a service, a business, or a public policy. Beneficiaries of a project may range from local to global stakeholders. It will not be necessary for the project solution to be implemented for a project to be considered complete, such as if a device or a structure is called for. However, the project team must describe in detail whatever implementation is intended including for example, potential barriers and solution pathways, economic, political and considerations, and timelines. Teams will communicate their work in written and oral format according to a three-phase schedule as outlined below.

We are looking for:

- Creative ideas which demonstrate that sustainable approaches can solve wicked problems
- Ideas that integrate thinking across disciplines that rarely interact
- Solutions that will work across cultural boundaries
- Ideas that can arguably migrate from small to large scale
- Ideas that connect concepts, practices or systems that are normally in conflict
- Solutions for which there is a strong business case

We are not looking for:

- Solutions targeted on an unconfirmed need.
- Solutions confined to a narrow scope of application.
- Solutions built on the expertise of a single technology or discipline.
- Solutions that require an assumed behavior change or a required behavior change with unconfirmed potential
- Solutions that entail implementation of an idea developed by others, without additional innovation.

AIDS IN FORMING OR JOINING A TEAM

Experience in prior years has demonstrated that a significant barrier to team formation and consequently participation in the Challenge is that many students lack contact with others outside their major. This creates difficulties in forming interdisciplinary teams. Accordingly, several ways exist for students interested in participating in the Challenge to find others with similar interests outside (and inside) their major.

Business Bash, September 18, 2025 (11 am – 2 pm)

Business Bash is a tabling event in which organizations of interest to business majors, and other WMU majors well, promote the advantages of participating in their activities and programs. Delicious lunch snacks are available. At the Bronco Challenge table you can talk with Challenge faculty organizers, students who participated in prior years, and representatives from corporate sponsors who fund the Challenge prizes.

The event is held in the open-air courtyard adjacent to Schneider Hall, the Haworth College of Business.

Celebration of Sustainability, September 19, 2025 (11 am - 2 pm)

Learn about and sample much of what there is to know about sustainability at WMU. Organizations and activities that promote and practice sustainability on campus, and that includes the Bronco Challenge, will have displays and people to explain their role in campus sustainability and how you can be part of it all. The Challenge is also an opportunity to network with other students seeking to form or join a team to compete in the Challenge. The Celebration is organized by the Office for Sustainability, a sponsor of the Bronco Challenge

The event is held at the Board of Trustees Plaza adjacent to the Student Center, Waldo Library and Kanley Chapel.

Project Development and Networking Events, October 1 & Oct 7, 2025 (2pm - 5 pm)

On Wednesday, October 1 and Tuesday, October 7 events will be held in the Student Center Ballroom wherein students will be encouraged to network for the purpose of finding opportunities to form or join a tam to compete in the Bronco Challenge.

Students will be encouraged to wear names tags indicating their first name and major. There will be 17 tables, scattered throughout the ballroom, each dedicated (by visible signage) to one of the 17 SDGs.

Students will be encouraged to visit tables that align with their interests and share with others at that table the type of Bronco Challenge project that would interest them. As conversation starters, each table will have several copies of (1) a list of discussion questions pertinent to the SDG topic of the table and a (2) a summary of target problem areas specific to the SDG of that table.

Students may come and go to and from the events as their schedule permits.

Support Available from Waldo Library

Waldo Library offers specialized research support to Bronco Challenge participants seeking to develop strong, evidence-informed solutions. Students can schedule a 30-minute appointment—either in person or online—with a subject librarian. Appointments can help teams:

- Refine their understanding of the sustainability issue they want to address
- Locate credible sources on best practices, market data, or case studies
- Find reports, government data, or policy research related to their solution

Appointments with LuMarie Guth (Business Librarian) also qualify as an upper-level SPuRS-approved activity.

To schedule an appointment, visit: https://wmich.edu/library/subject-librarians

Finding a Team or a Teammate

New last year is an online Bronco Matching Tool, https://broncochallenge.github.io/matching-tool/, designed to facilitate the formation and completion of teams for the Bronco Challenge. It includes two main functionalities:

- 1. **Finding Team Members:** Existing team members can input their name, team name, email, select the skills they are looking for in a new member, specify their SDGs of interest, and indicate the academic majors of current team members. Once submitted, this request will be visible to prospective team members.
- 2. **Joining a Team:** Prospective team members can view a list of requests submitted by existing teams. Each request includes the team's contact information, details about the skills and interests they are seeking, and the academic majors of the existing team members. Prospective members can use the provided email to connect with the team.

CHALLENGE DELIVERABLES

Prepare written deliverables on 8.5" x 11" paper with 12 pt Times New Roman font, single- spaced with 1-inch margins, numbered pages, and submit in pdf format. Include a cover page containing a title, authors' names and the date.

Use graphics to convey points that may be difficult to explain or where a visual image may have greater impact than words. If a video is needed to complement the report, include a hyperlink and keep the video to 3 minutes or less.

Phase 1 – Team Formation and Proposal Submission - Due November 13, 2025

Your Phase 1 proposal is due November 13, 2025 by 5 pm via email to Professor Neil Drobny, PhD: Neil.Drobny@wmich.edu. Late submissions will not be accepted.

Limit your document to 7 pages of text, not including the cover page or table of contents. Organize your document in accordance with the 8 numbered paragraphs below and include the following information.

- 1. <u>Project Scope and Objectives.</u> Describe the scope and objectives of your project including the UN SDGs that reference the needs to which your solution is directed. As applicable, describe how social concerns of diversity, equity and inclusion will be included in your project. As previously noted, the objective of a Challenge project may be creation of a product, a service, a business, or a public policy.
 - If you have difficulty framing a problem, consult with Dr, Drobny. He may know of an issue faced by one of the Challenge sponsors that could be a potential Bronco Challenge Project.
- 2. <u>Project Inspiration.</u> Explain how and why you selected your Challenge and the design of your project. Explain how your views of pressing environmental, social and /or environmental issues have captured your attention.
- 3. <u>Solution Vision.</u> Describe your vision of the solution you have in mind. Who will be the beneficiaries and how will they use or benefit from it? What barriers do you anticipate and why do you think you can solve them?
- 4. <u>Solution Advantages</u> Discuss how your solution is a significant improvement over existing solutions and why you think it may not have been tried previously. How does the value(s) of your solution exceed the costs (tangible and intangible)? Were the primary factors economic, nature-based, technological, cultural or social factors, or something else?
- 5. <u>Project Management.</u> What are the key ingredients of your project management plan? Will one of your team members serve as your project manager? Identify key milestones and associated target

dates. How will you measure, document and communicate progress among team members? Consider including a Gantt chart in your proposal.

- 6. <u>Solution Implementation.</u> Would any form of pilot-scale implementation be needed to test your solution? For example, would there be a need to build a device or structure. Do you have post-Bronco Challenge thoughts on how to cover associated costs if there are such needs?
- 7. <u>Supporting Resources</u>. In what aspect of your work might you need help? Have you identified mentors or subject matter experts that you can tap into for guidance? Have you secured their agreement to work with you?
- 8. <u>Team Member Profiles</u>. Include a ¼- page summary identifying for each member of the team: academic major and standing, prior work or personal experience that created the team member's passion for working on the project and contact information. Designate one team member as the point of contact for your team. Teams must contain four people that collectively represent expertise in at least two, and desirably three, disciplines Proposals in which all team members represent the same discipline without significant difference in expertise (e.g. second major or minor or internship) will not be accepted.

Evaluation of the Phase 1 proposal will entail verification that the above 8 items have been fully and thoughtfully addressed. Proposals of 3-4 pages and/or that omit any of the above 8 items will not be accepted into the Challenge competition.

The evaluation of the Phase 1 proposal will also include critique as a written document including factors such as clarity, grammar and writing style. Depending on the nature of the critique, your team's clearance to move forward to Phase 2 of the Challenge may be conditional on meeting (for 30 minutes) with Dr. Drobny to discuss areas in need of significant improvement.

Student teams will receive evaluations of their Phase 1 proposals by November 18, 2025.

From November 20-25 at least two members of each team selected to move on to Phase 2 will be required to meet with Dr. Drobny to review the team's plans for kicking off their project; date and time to be arranged with Dr. Drobny.

<u>Phase 2 – Oral Progress Report</u> – February 2-11, 2026

Each participating team (all 4 members) shall meet in-person for up to one hour with Dr. Drobny and a Communications Center staff member for an oral progress report, to include a 10-minute Power Point presentation by one team member and follow up Q&A. These meetings will be held in the Communication Center, 3445 Schneider Hall.

The oral presentation should entail a clear and concise description of your solution and how it has evolved since submitting your proposal. Mention any adjustments you made since submitting your application and why you made them. Did the adjustments compromise the benefits of the solution? If so, do you feel these compromises were significant, and why or why not?

For the Q&A: involve all team members and be prepared to answer questions drawn from the following six pertinent areas.

1. <u>Project Drivers.</u> Prevailing social, environmental or economic conditions will be relieved or mitigated by your solution. Upon what evidence or assumptions do you base your claim? For

your selected solution indicated what stakeholders will benefit and to what degree. How do you know?

- 2. <u>Improvements.</u> How your solution is an improvement over existing or previously attempted solutions. Why do you think yours will be successful and why did previous attempts fail? Consider social, political, environmental and economic factors.
- 3. <u>Solution Detail.</u> How your solution "works." Does it depend on the cooperation of people other than the beneficiaries (such as government officials) or on the reliable function of other systems (power generation and distribution). How certain are you that the other connections can be implemented smoothly and why?
- 4. <u>Implementation Testing.</u> Implementation testing that you are planning. Barriers and difficulties do you anticipate and what are your contingency plans.
- 5. <u>Supporting Resources.</u> Support from mentors or industry experts regarding your project. Highlights of any advice you chose to follow and/or not follow and why.
- 6. Priority Tasks. Remaining high priority remaining issues you need to resolve or firm up.

Students will receive feedback at the conclusion of the Progress report meeting as to areas needing work to be competitive if they are chosen to be part of the final competition. On February 13, 2026, any team judged not to have made adequate progress to be competitive in Phase 3 will be so advised.

Phase 3 – Final Evaluations

Written Report - Due March 18, 2026

Your Phase 3 Final Report will be due March 18, 2026 by 5 pm via email to Professor Neil Drobny, Neil.Drobny@wmich.edu. Late submissions will not be accepted.

Limit your document to 5 pages and organize your document in accordance with the five numbered paragraphs outlined below and include the indicated information. Build on the feedback you received on your proposal and from your progress report meeting to strengthen your document.

- 1. <u>Detailed Solution Description.</u> Describe in detail the issue or problem your solution is designed to eliminate or mitigate. Indicate where in the SDGs the problem or issue is embedded and what elements, if any, in your solution also deal with diversity, equity or inclusion. Compared to existing solutions or prior attempts, what are the innovative elements of your solution? Did you have a way to test the idea of your solution with prospective beneficiaries? Is there a business case for your solution?
- 2. Path of Inquiry. Describe the path of inquiry that you employed to select the topic for your project. What criteria did you employ to "rule in" and "rule out" possibilities that you considered? How much weight did you give to your passion for the topic vs. the expertise among team members?
- 3. <u>Business Plan</u>. What are the highlights of the business plan for taking your solution to the next step, e.g. the problem being solved, costs to implement, value to be created, and pathways to implementation/commercialization? Is more analysis needed? Share the analysis evidence, and

critical thinking that make you believe there is a market for your solution. Would you do a pilot scale version? What if any type of business partners would be needed? What scale, schedule and source of funding would be needed? What skills, beyond those of the project team, would be needed?

- 4. <u>Lessons Learned</u>. As a team what did you do well? What could have been done better? What contributed to both aspects of your work? What would you do differently if you had the project to do over?
- 5. <u>Mentors and Experts</u>. Where did you find mentors and subject matter experts to be most helpful? How did you recruit them?

Student teams will be notified by March 23, 2026, via email if they have been selected to make an oral presentation to a panel of live judges in the morning of April 3, 2026; up to five teams will be selected to make an oral presentation.

Oral Presentation

Oral presentations should be supported by a slide deck and delivered by one person who will also handle the Q&A with judges. The content should address the five points specified above for inclusion in the written final report. The presentations will be in Room 2150 in Schneider Hall, the Dean's Conference Room in Haworth College of Business. The presentations will be recorded. The presenter must be physically present. The presentation will be limited to 15 minutes, and the Q&A will be limited to 10 minutes. The judges will have seen and evaluated your final report in advance. In the presentation the judges will be looking for:

- A well-organized, convincing and clear summary of your solution
- Evidence of originality and that here is an economic, social, political and environmental pathway for implementation
- Prompt and thoughtful answers to questions

After the presentations, judges will meet to discuss their combined scoring of the final reports and oral presentations and to determine the first, second and third prize winners. After the winners have been announced and a symbolic check for \$10,000 is presented to the winning team, judges will be asked to provide overarching comments to each presenting team. Everyone in attendance will then be invited and encouraged to stay for lunch and informal discussions.

TERMS & CONDITIONS

Eligibility

Teams must have 4 members with skills in at least two and preferably three disciplines. To be eligible to participate, all team members must be full time students in good standing at WMU.

If a team member becomes ineligible the team member will be dropped from the competition and the remaining team members will have one opportunity to recommend to the Challenge Committee another eligible student to take the vacated position. The Challenge Committee will have 10 days to accept or reject the recommendation. In the case of rejection, the team will be dropped from the Challenge. Similar terms will apply if a team member voluntarily withdraws from the competition.

If a second team member becomes ineligible or withdraws from the Challenge, the team will forfeit its participation in the Challenge.

If loss of a team member is occasioned by an act of God, the Challenge Committee will waive the above requirements and will work with the affected team to arrive at a fair and equitable path forward.

Financial

There is no fee to participate in the Challenge, but teams are responsible for any costs that may be incurred in creating and submitting required materials.

Cash awards will be divided equally among team members. All winners of cash awards are solely responsible for applicable income taxes.

Winners of cash awards will be required to complete and sign documents affirming eligibility, release of liability and granting public release of the Challenge results. Required documents must be signed and returned within 7 days of the date of notification. A parent or guardian of a cash reward winner less than 18 years of age will be required to sign and ratify required documents.

Intellectual Property

Written and supporting material submitted as part of the Challenge competition will remain the intellectual property of the team members that submitted such property and may be developed and promoted at their sole discretion. However, by submitting such materials as part of the Challenge competition, WMU is accorded the right to use such material and the educational background of the students in non-commercial institutional promotion.