youthstem journal club

Summer Program 2026

Program Outline & Information Packet

Program at a glance

Format 100% online (Zoom)
Duration 4 weeks beginning the week of June 15, 2026
Sessions Two 1-hour sessions per week (days/times TBD)
Parent Meeting Weekend of June 13–14, 2026
Final Presentations Saturday of Week 4

Program Overview

The Youth STEM Journal Club (YSJC) Summer Program gives middle and high school students a structured introduction to scientific research through real-world journal articles. Over four weeks, students read, discuss, and present papers in their chosen STEM field under the mentorship of experienced high school student leaders.

Our 2026 program runs fully online over Zoom, making it accessible to students regardless of location. The emphasis is on scientific curiosity, mentorship, and discussion rather than grades or tests.

What students take away

- **Confidence reading scientific literature —** the ability to dissect a real research paper, not just a textbook chapter.
- **Mentorship from older students —** guided discussions led by high schoolers actively engaged in research and STEM.
- **A capstone presentation —** students walk away having presented their own analysis of a paper to peers and parents.
- **A peer community —** small-group cohorts built around shared scientific interests.

Topic Groups

The 2026 program will offer cohorts across several STEM fields. Specific subjects are being finalized as we confirm qualified mentors. Final subject list will be announced prior to registration close.

Subjects under consideration

- Biology
- Chemistry
- Computer Science
- Mathematics
- Neuroscience
- Physics

- Psychology

Students may indicate up to two subject preferences on the registration form. A mid-program rotation opportunity will be offered for students who want exposure to a second field.

Program Structure

Each week follows a consistent rhythm: two live Zoom sessions, asynchronous reading via Google Classroom, and optional interactive activities (Kahoot, Gimkit) to keep engagement high.

Week-by-week outline

Weekend 0	Parent & Student Orientation (June 13–14)
Orientation	**Program introduction and Q&A** • Walk-through of the program format, expectations, and Google Classroom setup • Introduction to mentors and subject cohorts • Live Q&A with parents and students

Week 1	Foundations of Reading Research
Day 1	**Introduction to research literature** • Anatomy of a research paper: abstract, methods, results, discussion • Types of research — experimental, observational, computational, theoretical • Breakout rooms by subject cohort to meet mentors
Day 2	**First paper introduced** • Mentors introduce the cohort's first paper and its real-world context • Begin guided reading and annotation • Soft-deadline reading assignment posted to Google Classroom

Week 2	Getting Started with Research
Day 1	**Results & interpretation** • Reading figures, tables, and statistical claims • Cohort discussion: what do the results actually show? • Gimkit or Kahoot review on key terms from the week
Day 2	**Methods deep-dive** • Discussion of the experimental or analytical methods used in the paper • How researchers design a study — controls, variables, sample size • Live activity: identify the methodology in a short companion paper

Week 3	Critical Thinking in Research
Day 1	**Limitations and critique** • Identifying limitations, confounders, and unanswered questions in the paper • How peer review and replication work in practice • Students draft three critical questions to bring to the next session
Day 2	**Connecting the paper to the broader field** • Where does this paper fit in the existing literature landscape? What are its unique offerings and how can it be expanded upon? • Discussion of related work and follow-up studies • Mentors help students choose the angle for their final presentation and give them strategies and tips for starting off

Week 4	Presentation & Communication
Day 1	**Final presentation preparation** • Clinic on science communication covering effective slide-making, pacing, and using plain-language framing • Mentors give live feedback on student draft slides and help them run through practice presentations, giving tips and tricks for success • Final logistics confirmed and communicated for Presentation Day
Day 2	**Presentation Day** • Each department head will introduce their group and their works • Students present their paper analyses and insights to the audience • Q&A sessions with students and leads after each presentation • Closing remarks and program celebration

Academic Expectations

Although the time commitment is moderate, students are expected to complete asynchronous assignments between sessions — primarily pre-readings (about three pages per session) and short reflection notes. This is not a graded course, and no formal evaluations will be given.

Our goal is to foster scientific curiosity, mentorship, and open discussion — *not assessments or tests.*

Engagement & retention

- **Soft deadlines on Google Classroom** to give students structure without high-stakes pressure.
- **Interactive review activities** (Kahoot, Gimkit) embedded into sessions.
- **Small cohort sizes** so every student has a voice in discussion.

Online Conduct & Expectations

To keep sessions productive and respectful, all participants agree to the following expectations across every Zoom session.

Preparation

1. Complete the assigned reading (approximately three pages per session) before each meeting.
2. Come with at least one question, note, or reflection to share with your cohort.
3. Submit any Google Classroom assignments by the posted soft deadline.

Zoom etiquette

4. Join on time with a stable internet connection.
5. Cameras on for the full session — your full face (head to shoulders) should be clearly visible.
6. Microphones muted unless speaking or instructed otherwise.
7. Use a neutral, non-distracting background and avoid multitasking during the session.
8. Display your real first and last name on Zoom for attendance.

Respect & participation

9. Show respect to mentors, peers, and guests at all times.
10. Disagreements are welcome — disrespect is not.
11. Participate thoughtfully in discussions and breakout rooms.

Attendance

12. Notify your mentor in advance if you must miss a session and complete any assigned work independently.
13. Repeated unexcused absences or violations of these expectations may result in dismissal from the program.

Contact & Next Steps

We are excited to welcome a new cohort of students into the program this summer. Watch for the registration form and parent meeting details in the coming weeks.

Questions?

Email us at **ysjcteam@gmail.com**

We typically respond within 48 hours.

Thank you for joining us in making STEM research approachable for every student.