

Review the Announcement Criteria

"Essential things to know for a competitive STEM proposal"

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SpSt 570: Writing proposals for STEM grant opportunities - September 2025

Objective: Winning STEM Proposals

"Great science alone doesn't get funded. Compliant, criteria-driven science does."

Our goal is simple: **turn good ideas into fundable plans** by writing exactly to how reviewers grade.

Today we **read** like **engineers** (**decoding the call**, **mapping the criteria**) and **write** like **reviewers to win the points**.



Metrics: Why proposals win?

Funding is competitive:

- NSF funded 28.8 % of proposals in FY 2023 (11,056 awards / 38,340 proposals) similar to 28 % in 2022 and 26 % in 2021.
- NIH Research Project Grants (R01, R21) had a 21 % success rate in 2023 and 19 % in 2024.

Compliance is non-negotiable: Non-compliant NSF proposals are returned without review, resulting in 0 % chance of funding.

Key takeaway:

- → Winning isn't about having the flashiest science. it's about meeting every requirement and making it effortless for reviewers to award points.
- → Write exactly to the criteria, stay within every rule, and present a feasible, defendable plan.

Review the Announcement Criteria: Steps

| Step | Time to Spend | What to Do |
|-----------------------|---------------|---|
| 1. Quick Scan | 0–2 min | Skim the call for deadline, eligibility, budget, and "Review Criteria." Use <i>Ctrl+F</i> for words like <i>shall</i> , <i>must</i> , <i>required</i> . |
| 2. Deep Scan | ~10 min | Read these in order: 1)Deadlines & submission system \rightarrow 2) Eligibility \rightarrow 3) Budget cap & project period \rightarrow 4) Required docs/templates \rightarrow 5) Review criteria \rightarrow 6) Formatting rules. |
| 3. Identify your Team | ~10 min | Decide who must be on the proposal (co-Pls, collaborators). Begin outreach so letters and biosketches aren't last-minute. |
| 4. Capture Criteria | ~10 min | Copy each review criterion, copy the words exactly as they appear in the announcement. |
| 5. Build Outline | ~30 min | Turn each copied review criterion into a section header in your proposal outline. |

Review the Announcement Criteria: Steps (Continued)

| Step | Time to spend | What to Do |
|----------------------------|---------------|---|
| 6. Draft Key Points | ~30 min | Under each header, write three short lines: Claim (what you will achieve), Evidence(data/figures/past results), and Why It Matters(tie back to the call). |
| 7. Re-Check Compliance | ~30 min | Confirm eligibility, budget, scope, and formatting still match the call after outlining. |
| 8. Write White Paper/Pitch | ~60 min | Prepare a concise, one-page white paper/ brief pitch summarizing your idea and fit to the call. |
| 9. Contact Program Officer | ~10 min | Send a concise one-page white paper and summary email to the PO to confirm fit (before you spend weeks writing). |

Call Markup

| Danisa | Must-have files (checklist) | |
|--|---|--|
| Program / FOA #: | ☐ Project narrative (limit: pages) | |
| Due date & time (TZ): Submission portal: | ☐ Biosketch (SciENcv) | |
| Can I apply? | $\hfill\Box$ Other required section specific to the call | |
| Eligibility (Pl/org): Yes / NoBudget cap: \$ Duration: months | ☐ Current & Pending | |
| Team | ☐ Budget + justification (Any cost share approval)☐ Facilities/Resources | |
| Review criteria | ☐ Letters of collaborations / any other type of letter (Y/N) | |
| 1. | | |
| 2. | ☐ Data/Management plan/Mentoring Plan | |
| 3. | ☐ Compliance items (IRB/DEIA) | |
| Format rules | Email/Call DO: Overtions and 1 page white paper | |
| Pages: Font/size: Margins/spacing: File type: | Email/Call PO: Questions and 1-page white paper | |

Red flags

- Missing document / wrong template.
- Over page limit / formatting violation.
- Budget > cap / ineligible costs.
- Ineligible PI/org.

Score Boosters

- Write to the criteria: reuse their exact words
- **Stay compliant**: pages, fonts, templates, file type
- Show feasibility: clear plan, Team roles, one strong piece of proof

Thank you!

Any questions?

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