

NSF Proposal Checklist and Outline for NSF Grant Proposal Guidelines 19-1

Red text highlights changes effective for proposals submitted or due on or after February 25, 2019. (Updated 2/14/19)

COMPONENTS OF PROPOSAL	ELEMENTS TO COMPLETE	NOTES	INTERNAL DEADLINE
Formatting		<p>Pagination: Each section of the proposal that is uploaded as a file must be individually paginated prior to upload to the electronic system.</p> <p>Proposal Margin and Spacing Requirements The proposal must be clear and conform to the following requirements:</p> <p>a. Use one of the following typefaces identified below:</p> <ul style="list-style-type: none"> • Arial, Courier New, or Palatino Linotype at a font size of 10 points or larger; • Times New Roman at a font size of 11 points or larger; or • Computer Modern family of fonts at a font size of 11 points or larger. • In addition to the typefaces identified above, Macintosh users also may use Helvetica and Palatino typefaces. <p>No more than six lines of text within a vertical space of one inch.</p> <p>b. Margins, in all directions, must be at least an inch. These requirements apply to all uploaded sections of a proposal, including supplementary documentation. See GPG Chapter II.C.B Effective for proposals due on or after February 25, 2019:</p> <ul style="list-style-type: none"> • <u>Proposal Preparation in Research.gov</u> – Chapter 1.A specifies that the on-screen instructions in Research.gov may differ from what is stated in the PAPPG and that the on screen instructions must be followed. • Proposal Fonts has been updated to specify that <u>fonts not listed in the PAPPG may be used</u> for mathematical formulas, equations, or when inserting Greek letters or special characters. See Chapter II.B.2 	
Cover Sheet	Fillable form	<p>Effective for proposals due on or after February 25, 2019</p> <ul style="list-style-type: none"> • A check box has been added titled “Funding for Foreign Organization” that <u>MUST</u> be checked on the coversheet in cases where the PI considers a foreign organization’s involvement to be essential to the project (e.g. through subawards or consultant arrangements) • If the “Funding for Foreign Organization” box is checked, the PI also <u>MUST</u> enter the name of the applicable country(ies) in the <i>“International Activities Country Names(s)”</i> box. See GPG Chapter II.C.2.a • Types of proposals now specifies that “RAPID”, “EAGER” and “RAISE” must be included in the proposal project title. See GPG Chapter II.C.2.g(vi)(e) 	Final uploaded to Fastlane 5 full business days before the deadline

COMPONENTS OF PROPOSAL	ELEMENTS OF PROPOSAL	NOTES	INTERNAL DEADLINE
Project Summary	Three separate text boxes for three separate parts OR summary with special characters uploaded as Word or PDF document to supplementary documents	<p>Part 1. Overview Part 2. Statement on the Intellectual Merit of the proposed activity. Part 3. Statement on the Broader Impacts of the proposed activity. Generally limited to 1 page total for all three parts. <u>Only</u> summaries with special characters should be loaded into the “Project Summary with special characters” under “Supplementary documents”.</p> <p>See GPG Chapter II.C.2.b.</p>	<p><i>Draft uploaded to Fastlane 5 full business days before the deadline. PI may make edits up until two full business days before the deadline.</i></p>
Project Description	Uploaded as word or PDF document	<p>Generally limited to 15 pages that includes a separate section that discusses broader impacts of the proposed project. PI’s are cautioned that the Project Description must be self-contained and that URL’s are not to be used. The description must include results from prior NSF funding support <u>with an award with an end date within the last 5 years or any current funding, including no cost extensions (please refer to #2 below)</u> for all PI’s and Co-PI’s including those on any subcontracts. In cases where the PI or Co-PI has received more than one award, they only need to report on the <u>one</u> award most closely related to the proposal. A summary of results of the completed work must be described under two distinct headings: intellectual merit and broader impacts. The listing of publications resulting from an NSF award must provide a complete bibliographic citation for each publication in either the Results from Prior NSF Support section or in the References Cited section of the proposal.</p> <p>Please Note:</p> <ol style="list-style-type: none"> 1.) Intellectual Merit: Project Description must now contain a separate section specifically identified as "Intellectual Merit". This is in addition to the previously required sections of “Broader Impact” and “Results of Prior NSF support”. 2.) Results from Prior NSF Support, clarifies that the timeframe during which any PI or co-PI that has received NSF support must report on such funding is for an award with an end date within the last 5 years. <p>See GPG Chapter II.C.2.d. and Chapter II.C.2.d(iii),</p> <p>Effective for proposals due on or after February 25, 2019</p> <ul style="list-style-type: none"> • Subawards, has been updated to clarify that the description of the work to be performed by the subaward <u>MUST BE INCLUDED</u> in the project description. <p>See Chapter II.C.2.g(vi)(e)</p>	<p><i>Draft uploaded to Fastlane 5 full business days before the deadline. PI may make edits up until two full business days before the deadline.</i></p>

COMPONENTS OF PROPOSAL	ELEMENTS TO COMPLETE	NOTES	INTERNAL DEADLINE
Project Description (Continued)		<p>Foreign organizations - NSF rarely provides direct funding support to foreign organizations. NSF will consider proposals for cooperative projects involving U.S. and foreign organizations, provided support is requested only for the U.S. portion of the collaborative effort. In cases however, where the proposer considers the foreign organization's involvement to be essential to the project (e.g., through subawards or consultant arrangements), the proposer must explain why local support is not feasible and why the foreign organization can carry out the activity more effectively. In addition, the proposed activity must demonstrate how one or more of the following conditions have been met:</p> <ul style="list-style-type: none"> • The foreign organization contributes a unique organization, facilities, geographic location and/or access to unique data resources not generally available to U.S. investigators (or which would require significant effort or time to duplicate) or other resources that are essential to the success of the proposed project; and/or • The foreign organization to be supported offers significant science and engineering education, training or research opportunities to the U.S. <p><u><i>Such information must be included in the project description section of the proposal. The box for "Funding of a Foreign Organization, including through use of a subaward or consultant arrangement" must be checked on the Cover Sheet if the proposal includes funding for a foreign organization.</i></u></p> <p>See Chapter I.E.6</p>	
References Cited	Uploaded as word or PDF document	<p>No page limit but must include bibliographic citations only. All author names must be listed for each reference and no abbreviations or "et.al" may be used. If there are no references cited, a statement to that effect should be included in this section and uploaded into FastLane. See GPG Chapter II.C.2.e.</p>	<p><i>Draft uploaded to Fastlane 5 full business days before the deadline. PI may make edits up until two full business days before the deadline.</i></p>

COMPONENTS OF PROPOSAL	ELEMENTS TO COMPLETE	NOTES	INTERNAL DEADLINE
Biographical Sketches	<p>Required for each individual identified as senior project personnel.</p> <p>Uploaded as a separate PDF document for each individual identified as senior project personnel.</p> <p>It is no longer acceptable for biosketches of all senior personnel to be grouped together in a single PDF file.</p> <p>A single PDF file must be uploaded for each senior personnel.</p>	<ul style="list-style-type: none"> - A biographical sketch (limited to two pages) is required for each individual identified as senior personnel. - Do not submit any personal information in the biographical sketch - Inclusion of additional information beyond that specified below may result in the proposal being returned without review. <p>Organize as follows:</p> <p><u>(a) Professional Preparation</u></p> <ul style="list-style-type: none"> - Professional preparation must be listed in chronological order starting with the undergraduate degree. The location of the institution must now be listed along with the major, the type of degree and the year the degree was received. Post- doctoral appointments should show the inclusive dates in years. Format below: <p>Undergraduate Institution(s) Location , Major, Degree & Year</p> <p>Year Graduate Institution(s) Location , Major, Degree & Year</p> <p>Post-doctoral Institution(s) Location Area Inclusive Dates (years)</p> <p><u>(b)Appointments</u></p> <p>A list, in reverse chronological order, of all the individual’s academic/professional appointments beginning with the current appointment.</p> <p><u>(c)Products</u></p> <p>A list of: (i) up to five products most closely related to the proposed project; and (ii) up to five other significant products, whether or not related to the proposed project. Acceptable products must be citable and accessible including but not limited to publications, data sets, software, patents, and copyrights. Unacceptable products are unpublished documents not yet submitted for publication, invited lectures, and additional lists of products. Only the list of ten will be used in the review of the proposal. Each product must include full citation information including (where applicable and practicable) names of all authors, date of publication or release, title, title of enclosing work such as journal or book, volume, issue, pages, website and URL or other Persistent Identifier. If only publications are included, the heading “Publications” may be used for this section of the Biographical Sketch.</p>	<p>Final uploaded to Fastlane 5 full business days before the deadline</p>

COMPONENTS OF PROPOSAL	ELEMENTS TO COMPLETE	NOTES	INTERNAL DEADLINE
Biographical Sketches (continued)		<p><u>(d) Synergistic Activities</u> A list of up to five examples that demonstrate the broader impact of the individual’s professional and scholarly activities that focuses on the integration and transfer of knowledge as well as its creation. Examples could include, among others: innovations in teaching and training (e.g., development of curricular materials and pedagogical methods); contributions to the science of learning; development and/or refinement of research tools; computation methodologies, and algorithms for problem-solving; development of databases to support research and education; broadening the participation of groups underrepresented in STEM; and service to the scientific and engineering community outside of the individual’s immediate organization.</p> <p>Effective for proposals due on or after February 25, 2019</p> <p><u>Synergistic Activities – The selection of activities IS LIMITED to 5 separate examples. Multiple entries under a single example are NO LONGER permitted.</u></p> <p>See Chapter II.C.2.f(i)(d)</p> <p><u>(e) Collaborators & Other Affiliations</u> Collaborators are no longer reported on the biosketch and are reported in a new single copy document “Collaborators and other Affiliations Information” in Fastlane.</p> <p>See GPG Chapter II.C.2.f.</p>	Final uploaded to Fastlane 5 full business days before the deadline

COMPONENTS OF PROPOSAL	ELEMENTS TO COMPLETE	NOTES	INTERNAL DEADLINE
Budget	Fillable form (NSF 1030) \$ / Years	Final budget includes subcontract budgets.	Final uploaded to Fastlane 5 full business days before the deadline
Budget Justification.	Budget Justification. uploaded as word or PDF document	<p>Cost principles may be found in 2 CFR § 200, Subpart E</p> <p>Limited to 5 pages (please see #1 below) per proposal. proposals linked in Fastlane are considered separate proposals, and each proposal may contain 3 pages for the budget justification. For proposals that contain a subaward(s), each subaward must include a separate budget justification of no more than three pages.</p> <p><u>Travel – Per GPG Chapter II.C.2.g.iv. - “Travel and it’s relation to the proposed activities must be specified and itemized by destination and cost.</u> Funds may be requested for field work, attendance at meetings and conferences and other travel associated with the proposed work, including subsistence. In order to qualify for support, however, attendance at meetings or conferences must be necessary to accomplish proposal objective, or disseminate its results. Allowance for Air Travel normally will not exceed the cost of round-trip, economy airfares.</p> <p>Persons traveling under NSF grants must travel by U.S. Air carriers, if available.</p> <p>Materials and Supplies – Per GPG Chapter II.C.2.d.vi.a., the proposal budget justification should indicate the general types of expendable materials and supplies required. Materials and supplies are defined as tangible personal property, other than equipment, costing less than \$5,000, or other lower threshold consistent with the policy established by the proposing organization. Cost estimates must be included for items that represent a substantial amount of the proposed line item cost.</p> <ol style="list-style-type: none"> 1.) The Budget Justification has been revised to increase the number of pages allowed for the budget justification to no more than five pages per proposal. This change applies to budget justifications for both proposers and subawardees. 2.) Senior Personnel Salaries & Wages Policy, it is the proposing organization’s responsibility to define and apply the term "year" and include the definition in the budget justification. UMass “Year” is fiscal year (7/1 to 6/30) 3.) Indirect Costs, has been updated to state that amounts for indirect costs should be specified in the budget justification. <p>See GPG Chapter II.C.2.g</p>	Final uploaded to Fastlane 5 full business days before the deadline

COMPONENTS OF PROPOSAL	ELEMENTS TO COMPLETE	NOTES	INTERNAL DEADLINE
Budget Justification (Continued)	Budget Justification. uploaded as word or PDF document	<p>Effective for proposals due on or after February 25, 2019 Participant Support Costs –</p> <p>1. The following language has been added to clarify when an individual should be classified as participant or a speaker at a conference: <i>“Speakers and trainers generally are not considered participants and should not be included in this section of the budget. However, if the primary purpose of the individual’s attendance at the conference is learning and receiving training as a participant, then the costs may be included under participant support. If the primary purpose is to speak or assist with management of the conference, then such costs should be budgeted in appropriate categories.”</i></p> <p>2. The following has been added to the address FAQ’s regarding the use of the participant support category of the budget: <i>“Funds may not be used to cover room rental fees, catering costs, supplies, etc. related to an NSF–sponsored conference. This section of the budget also may not be used for incentive payments to research subjects. Human subject payments should be included on line G6 of the NSF budget under ‘Other Direct costs,’ and indirect costs should be calculated on the payments in accordance with the organization’s federally negotiated indirect cost rate.”</i> See Chapter II.C.2.g(v)</p>	
Current & Pending Support	Fillable form or uploaded as word or PDF document	<p>Must list this proposal as pending. Faculty effort should be defined as either “Academic” or “Summer” for calendar appointments, or “calendar” for 12 month appointments</p> <p>All current project support should be listed in this section of the proposal, including internal funds allocated toward specific projects. It is no longer allowable for the current and pending support of all senior personnel to be grouped together in a single PDF file. Current and pending support must now be uploaded separately for each individual identified on the proposal as senior personnel.</p> <p>See GPG Chapter II.C.2.h.</p>	Final uploaded to Fastlane 5 full business days before the deadline
Facilities, Equipment and Other Resources	Uploaded as word or PDF document	<p>In narrative style, include an aggregated description of the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project. No page limit but describe only those resources that are directly applicable. If there are no facilities, equipment and other resources information, a statement to that effect should be included in this section. Any substantial collaboration with individuals not included in the budget should be described in Facilities. See GPG Chapter II.C.2.i.</p>	Final uploaded to Fastlane 5 full business days before the deadline

COMPONENTS OF PROPOSAL	ELEMENTS TO COMPLETE	NOTES	INTERNAL DEADLINE
<p>Special Information and Supplementary</p> <p>See GPG Chapter II.C.2.j. for additional information that may be requested.</p>	<p>Postdoctoral Researcher Mentoring Plan. uploaded as word or PDF document</p>	<p>Required for proposals requesting funding for postdocs. Generally limited to 1 page. For collaborative proposals or proposals with subcontractors, only one coordinated mentoring plan may be submitted.</p>	<p>Final uploaded to Fastlane 5 full business days before the deadline</p>
	<p>Data Management Plan. uploaded as word or PDF document</p>	<p>Required for all proposals. Describe how the proposal will conform to NSF policy on the dissemination and sharing of research results. Generally limited to 2 pages.</p> <p>Data management plans that involving collaborative activities should include only one supplemental combined Data Management Plan, regardless of the number of non-lead collaborative proposals or subawards included.</p>	<p>Final uploaded to Fastlane 5 full business days before the deadline</p>
	<p>Letters of Collaboration. Uploaded as word or PDF document</p>	<p>-Any substantial collaboration with individuals not included in the budget should be described and documented with a letter from each collaborator and further detailed in the Facilities document. Collaborative activities that are identified in the budget should follow the instructions in GPG Chapter II.D.3.</p> <p>- Letters of collaboration should be limited to stating the intent to collaborate and should not contain endorsements or evaluation of the proposed project. The recommended format for letters of collaboration is as follows: "If the proposal submitted by Dr. [insert the full name of the Principal Investigator] entitled [insert the proposal title] is selected for funding by NSF, it is my intent to collaborate and/or commit resources as detailed in the Project Description or the Facilities, Equipment or Other Resources section of the proposal."</p>	<p>Final uploaded to Fastlane 5 full business days before the deadline</p>
	<p>Letters of Support</p>	<p>Should not be submitted unless they are required by a specific program solicitation. Follow formatting requirements (if any) of the solicitation</p>	<p>Final uploaded to Fastlane 5 full business days before the deadline</p>

COMPONENTS OF PROPOSAL	ELEMENTS TO COMPLETE	NOTES	INTERNAL DEADLINE
Single copy documents	Collaborators & Other Affiliations Information	<p>-Collaborators & Other Affiliations Information, is a new single-copy document that requires each senior project personnel to provide information regarding collaborators and other affiliations. This information used to be provided as part of the Biographical Sketch. The new format no longer requires proposers to identify the total number of collaborators and other affiliations when providing this information. The following information regarding collaborators and other affiliations must be separately provided for each individual identified as senior project personnel:</p> <ul style="list-style-type: none"> ○ Collaborators and co-Editors. A list of all persons (including their current organizational affiliations) who are currently, or who have been collaborators or co- authors with the individual on a project, book, article, report, abstract or paper during the 48 months preceding the submission of the proposal. Also include those individuals who are currently or have been co-editors of a journal, compendium, or conference proceedings during the 24 months preceding the submission of the proposal. If there are no collaborators or co- editors to report, this should be so indicated. ○ Graduate Advisors and Postdoctoral Sponsors. A list of the names of the individual’s own graduate advisor(s) and principal postdoctoral sponsor(s), and their current organizational affiliations, if known. ○ Thesis Advisor and Postgraduate-Scholar Sponsor. A list of all persons (including their organizational affiliations, if known), with whom the individual has had an association as thesis advisor. In addition, a list of all persons with whom the individual has had an association within the last five years as a postgraduate- scholar sponsor. <p>The information is used to help identify potential conflicts or bias in the selection of reviewers. See GPG Exhibit II-2 for additional information on potential reviewer conflicts.</p> <p>Please Note -</p> <ul style="list-style-type: none"> ● Collaborators & Other Affiliations Information, information regarding collaborators and other affiliations (COA) are be provided through use of a standard NSF COA template. ● The names in the form are no longer required to be alphabetized. The form must be uploaded as .xlsx or .xls file to enable preservation of searchable text. <p>Effective for proposals due on or after February 25, 2019</p> <ul style="list-style-type: none"> ● Table 2 - the column heading of ‘Organizational Affiliation’ has been changed to ‘Type of Relationship’ column: please specify the personal, family or business relationship involved. ● Conference Proposals in excess of \$50,000 MUST INCLUDE the Collaborators and Other Affiliations Information in the proposal submission ● Equipment Proposals: has been updated to specify the Collaborators and Other Affiliations Information MUST BE INCLUDED in the proposal submission. 	<p>Final uploaded to Fastlane 5 full business days before the deadline</p> <p>See Chapter II.C.1.e</p> <p>See Chapter II.E.7</p> <p>See Chapter II.E.8</p>

COMPONENTS OF PROPOSAL	ELEMENTS TO COMPLETE	NOTES	INTERNAL DEADLINE
Appendices	Generally not allowed	Appendices may not be included unless a deviation has been authorized. See GPG Chapter II.A, and II.C.k.	Final uploaded to Fastlane 5 full business days before the deadline
Special Guidelines; Special Considerations		Any additional materials requested by funding agency. See GPG Chapter II.D.	Final uploaded to Fastlane 5 full business days before the deadline
Suggested Reviewers	Optional fillable form	Proposers may include a list of suggested reviewers who they believe are especially well qualified to review the proposal. Proposers also may designate persons they would prefer not review the proposal, indicating why. GPG Exhibit II-2 contains information on conflicts of interest that may be useful in preparation of this list. The list of suggested reviewers, PIs should include the email address and institutional affiliation of persons they believe are well qualified to review the proposal.	Final uploaded to Fastlane 5 full business days before the deadline
Subcontract documentation	Only budget, budget justification, biosketch & current and pending forms need to be uploaded into Fastlane. Remaining documents are audit backup documents	<p>For NSF subcontracts the following information is required from each sub: budget, budget justification, statement of work, biosketches for all senior personnel, current & pending forms for all senior personnel, an NSF facilities form to be combined into the UMASS facilities form, a letter of intent to subcontract signed by the subcontractor's OPAS counterpart, a copy of federally approved F&A/indirect costs, a copy of the institution's fringe rate agreement, <i>and a UMASS subrecipient form to be filled out by the institution we are contracting with. This form may be found here: http://www.umass.edu/research/sites/default/files/documents/s_ubreipient_commitment_form_4_21_16_0.pdf</i></p> <p>Please note, Results from Prior NSF Support in the Project Description must also include sub PI's results, <u>and</u> the data management plan should be a coordinated document that include sub's data plan.</p>	Final to OPAS 5 full business days before the deadline

Please see next page for 'Additional Items'.

Additional Items:

GPG Chapter I. F. 3. "Natural or Anthropogenic Events" has been updated. In the event of a missed deadline due to a natural or anthropogenic event, the P.I. should contact the cognizant NSF Program Officer in the Division/Office to which they intend to submit their proposal and request authorization to submit a proposal after the deadline date. Proposers should then follow the written or verbal guidance provided by the cognizant NSF Program Officer.

To submit the proposal after the deadline date, proposers must check the "Special Exception to the Deadline Date Policy" box on the NSF Cover Sheet, indicating NSF approval has been obtained. A statement identifying the nature of the event that impacted the ability to submit the proposal on time should be uploaded under Nature of Natural or Anthropogenic event in the Single Copy Document section in FastLane. If available, written approval from the cognizant NSF Program Officer also should be uploaded under the Additional Single Copy Documents in the Single Copy Document section in FastLane.

Proposals Involving Vertebrate Animals, has been revised to enhance the clarity of guidance on the use of vertebrate animals for research or education on NSF supported projects. For projects at an international organization that involve the use of vertebrate animals, a statement from the international organization will need to be provided.
See Chapter II.D.4

Proposals Involving Human Subjects, has been supplemented with additional language regarding international projects. If the project involves human subjects and is to be performed outside of the US, evidence of IRB approval also is required.
See GPG Chapter II.D.5