# Guide for Preparing NUpath Proposals

## Introduction

This guide, created by a subcommittee[1] of the University Undergraduate Curriculum Committee (UUCC) and approved by that body, is intended to supplement the information available on the NUpath website. The website includes resources for faculty, advisors, and students and a link to the course dashboard, which allows viewers to see at a glance the courses that have been approved for each requirement. It also covers the NUpath framework and requirements, the learning goals associated with each requirement, and the approval process, including information about our course management system, Courseleaf.

The purpose of this guide is to provide faculty with information and advice for **preparing justifications** for course proposals. For this purpose, we are assuming that the proposer knows which NUpath requirement(s) they are requesting for the course in question. (See the Framework for rules governing how many requirements can be met with a single course.) The determination of whether to propose a course for NUpath and for which requirement(s) should be made by units and colleges with their pedagogical and curricular goals in mind.

This guide includes four components:

1. *A brief list of best practices* for developing NUpath proposals. Here you will find general advice on how to conceptualize and write NUpath justifications.

2. An FAQ. Here you will find additional information regarding the submission and review processes for NUpath proposals.

3. *A set of exemplar NUpath justifications*. Here you will find actual examples of justifications written for approved NUpath proposals. These examples are not perfect, but they are strong, and together they represent the diverse ways that colleagues from the various colleges help student meet NUpath learning goals.

4. *A set of NUpath Nopes, or poorly written justifications*. Here you will find examples of what *not* to do. These justifications, composed by members of the UUCC for this purposes, are entirely fictional. They reflect common problems we have encountered in justifications, but they are not modeled on any actual proposals we have received.

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# Best Practices for Developing NUpath Proposals

It is best to approach NUpath proposals as an opportunity to articulate what your students will learn in your course, how they will learn it, and how they will demonstrate that they have learned it. Many faculty have reported that thinking in this explicit and systematic way about student learning has led to positive refinements of their courses and their teaching.

We recommend the following general procedure for developing NUpath proposals:

1. Spend some time thinking about what you want your students to learn in the course.

2. Review the relevant NUpath goals and ask yourself:

    a. Will students have the opportunity to meet these learning goals in this course?
        *Note*: if your answer is "no," this may not be the right requirement for this course, or perhaps the course could benefit from some revision. The UUCC often asks, "Are we comfortable with the possibility that this course is the *only* course students might take in this category?" If you cannot convince yourself that this course clearly allows students to meet the learning goals for a particular requirement, you should not propose it for that attribute.
    b. Which assignments or activities are designed to help students meet the learning goals?
    c. What will students *do* and *produce* to demonstrate that they have acquired that knowledge and those skills?

3. For each learning goal in the relevant requirement, write a brief but detailed justification of *how the students will achieve the learning goals* (e.g. write papers, make drawings, write code, craft proofs, engage in debates, create business plans, conduct lab experiments). As we explain in the FAQ, you have the option of combining your justification into one answer, but we find that proposals have a better chance of approval when each learning goal is addressed separately.

    As you craft your justifications, here are some tips to keep in mind:

    - Focus your justification of what *students* do in the course, not on what the course covers or what you will teach them.
    - Use concrete verbs (instead of "students learn about," say "students make drawings and construct models that demonstrate their understanding of…")
    - Provide specific examples when possible. For instance, if the learning goal is to "evaluate and compare two or more theories of human difference," (DD, goal c) then it is useful to state which theories students will evaluate and compare and how. If different instructors may focus on different theories, it is fine to say something like, "In their final papers, students will evaluate theories *such as* x, y, and z."

- Respond directly to the learning goals without simply repeating them. For example, if a learning goal states that students should "acquire and assess techniques of interpretation," (IC, goal b) the justification should identify those techniques of interpretation and how they will be learned—e.g., "students will learn to conduct literary analysis, including close reading, through a series of short, critical papers on selected major works of the Harlem Renaissance."
- Keep the justifications brief but detailed; avoid expansive explanation or commentary about course content.
- Finally, remember that your proposal will be read by people outside your discipline. While it may seem obvious to you that your course falls squarely in the NUpath category, this may not be apparent to those in other disciplines. Make sure your justification is accessible and clear to non-expert readers.

# NUpath **FAQs**

Q. How long does the approval process take?

This depends on how long it takes approvers at each of the several steps in the Courseleaf workflow to act and on whether revisions are needed at any step. We recommend submitting your proposal two semesters before you intend the NUpath attribute(s) to take effect. A well-prepared proposal that follows the best practices above will have a better chance of moving through the process expeditiously.

Q. Should I submit a syllabus with my NUpath proposal?

Proposals for new courses must include a sample syllabus. We strongly recommend a syllabus be included with all NUpath proposals, even for existing courses. Committee members often consult syllabi to help them understand the justifications. While helpful, syllabi do not stand in for strong justifications. Proposers should take care to ensure that justifications, syllabi, and course descriptions are aligned.

Q. When should I use a NUpath Section Form as opposed to using the usual process in Courseleaf?

NUpath section forms are used for "one-off" sections—i.e., when the instance of the course will not be repeated. Approval of a section form applies the NUpath attribute(s) only to that one section; approval of a course in Courseleaf applies the NUpath attribute(s) to *all* instances of that course. In the latter case, if changes to the course result in students no longer being able to meet NUpath learning goals, the expectation is that the unit will alert its college and the Provost's Office that it wishes to withdraw the course from the NUpath category.

Q. What is the relationship between the description of the requirement and the learning goals?

The paragraph-long description of each requirement is intended to explain the "gist" of the requirement; the learning goals detail what, specifically, students should learn. Justifications should be keyed to learning goals.

Q. Do course proposals for multiple NUpath attributes fare better or worse than proposals for a single attribute?

We have approved plenty of courses for one attribute and plenty for multiple attributes. We will approve courses for as many NUpath attributes as are allowable under the rules of the Framework—as long as they allow students to meet the learning goals.

Q. What happens when the UUCC approves a course for one or some attributes but not others?

The relevant college's associate dean is made aware of the committee's decision. The associate dean should confer with the proposer to request the course be "rolled back" for revision in CourseLeaf or to retract the request for the unapproved attribute, thus allowing the course to move forward to the Registrar with the approved attributes.

Q. Does my course need to address all learning goals associated with a requirement in order to be approved for that requirement?

Yes.

Q. What if some of the activities of the course are optional or distributed among the students?

If engaging in a particular activity is necessary for students to meet the learning goals associated with a requirement and is the only way you would know they had met those learning goals, then *all* students must complete that activity in order for the committee to approve the course for that NUpath category. For collaborative work, it must be clear that each student will be able to meet all of the learning goals.

Q. Is there a hard-and-fast rule on how much time needs to be spent during a course on the learning goals, individually or collectively?

No. The committee is making a judgment about whether students have sufficient opportunity to meet the learning goals. It makes this judgment in light of the activities you describe your students undertaking in a course.

# NUpath Nopes: How Not to Write a Proposal

***The following negative examples are entirely fictional; they are not based on actual proposals we have received. However, they do exemplify common shortcomings of proposals we have rejected.***

## 1. Engaging with the Natural and Designed World

This is a fictional Transportation Innovations in Society course. Students explore scientific debates and technological progress associated with next-generation transportation. *Though the course provides students the opportunity to appreciate the methods that scientists, researchers, and innovators use to bring forward technology, it does not allow them to engage deeply in scientific methods themselves.*

A. Formulate a question that can be answered through investigation or a challenge that can be addressed through research or design.

Through readings and course material, students will learn about the environmental issues of internal combustion engines and historical technological barriers to alternative energy vehicle adoption. They will also read and discuss key review papers in battery and fuel cell development to understand how researchers achieved appropriate power delivery and range. They will read news articles reviewing automakers' usage of lighter materials in automotive parts.

*Students learn about questions that others have asked, but they do not formulate their own questions.*

B. Develop and use models based on evidence to predict and show relationships among variables between systems or components of systems in the natural and/or designed world.

Students will perform calculations to debate increases in performance vs. cost. Examples of such calculations may include increased mileage due to reduced weight, cost of materials for reduced weight, fuel usage and pollutant generation.

*These calculations are very basic. To complete these tasks, students don't need anything more than simple arithmetic. This does not satisfy the methodical vision of this category.*

C. Use and question scientific principles and practices to evaluate issues raised by the interplay of science, technology, and society.

Students will read and write essays reviewing published papers that debate key environmental issues in automotive technologies, and strategies automakers are taking in their design and manufacture. They will also write essays in which they use scientific principles learned in class to review and enter debates about the central environmental drivers of technology vs. regional consumer attitudes and perceptions.

*While this justification is a bit vague ("scientific principles" just repeats language form the learning goal), it would likely pass muster with the UUCC. **Note: Proposals fail if students do not have the opportunity to meet one or more of the learning goals.*

## 2. Exploring Creative Expression and Innovation

This is a fictional course on Modern Poetry. *While it engages students in studying the creative processes of authors, it does not engage them in their own creative process.*

A. Describe creative processes in one or more disciplines (e.g. art, business, writing, science, engineering)

This course covers the work of early-to-mid 20th century poets such as Pound, Frost, Eliot, Stein, Williams, Yeats, Stevens, Hughes, cummings, and Moore. We will explore: the origins of Modernism; links between the poetry of the time and other art forms, particularly film; the formal properties and innovations of this era in poetry; and the lasting impact of these writers on American culture and thought.

*The proposer has basically provided a course description, with little indication of what students will do in the course or **how** they will study creative processes.*

B. Generate an artifact (e.g., design, poem/essay, application, visualization, musical composition, product, prototype) through a creative process.

For their final project, students will have the option of producing a poem that invokes the voice or adopts the devices of one or more of the poets featured in the course.

*Because the creative project is optional, the proposer has not guaranteed that all students will generate a creative artifact.*

*C. Evaluate experimentation, failure, and revision in the creation of innovative projects.*

Certainly many poets of the modern era took to heart Pound's dictum to "Make it new!" But did they make it *good*? Did the syntactical and orthographic irregularities of Stein and cummings, for example, *succeed*? Were the long poems and poem-sequences of the 20s effective *as poems* (and not just responses to the shorter, Imagistic poems that preceded them)? A major thrust of this course is to determine how we would go about answering questions like these. In other words, we will cast a critical eye on the experimentation and innovation of the modernist poets under discussion.

*While these considerations are relevant to the learning goal, the committee has interpreted this learning goal to apply to students' own creative processes (as well). The committee also generally appreciates more straightforward responses to the learning goals.*

## 3. Interpreting Culture

This is a fictional Dialogue on Environmental Science in Copenhagen. One course is a "straight" environmental science course focused on the impact of industrial pollution on the natural environment of Denmark. The other—the basis of this proposal—is an introductory language course that involves basic language instruction and a few visits to cultural sites around the city. *Although the course is taught in another country and students receive some language instruction, it is a mismatch with the Interpreting Culture designation because it does not ask students to take Danish culture as its object of study. Students will learn something about Danish culture by being immersed in it, but this course does not ensure that they learn how to study and analyze cultural practices, artifacts, and texts. They do not engage particular strategies or methods of interpretation or confront interpretive theories. They will not come away from the course with a rigorous understanding of the traditions and history of Danish culture.*

A. Recognize and identify a variety of cultural practices and creations, their forms of production, and development over time.

Students will learn introductory Danish in the great Danish city of Copenhagen. They will learn how Danes shop, eat, and speak while they interact with and speak to the people of the city.

*Here, students are being exposed to the basics of the language and some cultural practices of Denmark, but they are not studying how culture is produced and developed over time. While language is a cultural practice, there is no indication that students will study it as such.*

B. Acquire and assess techniques of interpretation (including critical reading and observation techniques), criticism, and analysis of cultural practices, texts, and/or artifacts.

Students will keep a blog about their experiences in Copenhagen, and will publish these—along with pictures—for the class website. Some of this writing will be in Danish.

*There is no indication of any particular techniques of interpretation, criticism, or analysis that students are acquiring and assessing.*

C. Formulate arguments for and against different theories and interpretations of cultural practices, texts, and/or artifacts.

Students will be encouraged to practice their language skills with native Danish speakers, asking them about their cultural practices such as eating multiple types of herring and various child-rearing tactics.

*This justification makes no mention either of theories and interpretations of culture or of taking a stand in relation to them.*

A. **Conducting Formal and Quantitative Reasoning**

This is a fictional Technological Entrepreneurship course. One of the activities in the course is for students to identify past or future opportunities that explicitly require mathematics-based or science-based disciplines as part of the solution. Students discuss aspects of training, human resource development, as well as interdisciplinary engagement, and their roles in innovation. *The course educates the students in the need for formal and quantitative reasoning, but does not allow them to practice it. This requirement insists that students participate in a rigorous process of formal and quantitative reasoning. This course does not provide that opportunity.*

A. Recognize when examination of a phenomenon or situation can benefit from problem solving techniques and analyses that use formal reasoning.

Through course readings and in-class discussions, students will develop awareness of the disciplines that are employed for some common innovations (e.g., energy harvesting, search engines, wearable technology). They will learn the role of ideation, and at what point formal reasoning is necessary to propose and/or develop a solution.

*This satisfies A. **Note: Proposals fail if students do not have the opportunity to meet one or more of the learning goals.*

B. Use their expertise in some applications of formal reasoning and know when to call upon domain experts when a problem is beyond their personal expertise.

Through source readings, students will learn how teams are built, and grown, through the different stages of innovation. They will write papers exploring approaches that begin with "non-expert" personnel, and those that begin with experts.

*This satisfies only part of B. Students describe and assess the expertise of others, but they do not use or assess the limits of their own expertise in formal and quantitative reasoning.*

C. Generate artifacts that require formal reasoning and planning. These artifacts might include logical proofs, mathematical computations, software, simulations, problem solutions, or plans/analyses in a variety of disciplines that require a formal, systematic component.

As a course requirement, students will develop a business strategy to address a technological issue. As part of their RWW (Real, Worth, Win) write-up, they will broadly identify key questions that will need to be addressed, and appropriate recruitment and communication strategies to accomplish this.

*This artifact recognizes the importance of formal and quantitative reasoning, but does not provide students the opportunity to practice it.*

B. **Understanding Societies and Institutions**

This is a fictional History of Western Music course. *Though it does consider music in broad social contexts, society and institutions are not sufficiently addressed to allow students to meet the learning goals. The course does not ask students to engage with social, political, or economic theories, and for the most part, it is not clear what students will do to demonstrate that they have met the learning goals.*

A. Describe current theories of how social, political, or economic institutions, systems, and processes work.

This course offers a broad introduction to music history from ancient times through the Baroque era. It focuses on the musical theories, practices, and instrumentation of each historical era, paying special attention to the social and cultural milieu as a backdrop for musical developments.

*This justification focuses on what the course covers rather than what students will do. In using the word "backdrop," it makes clear that societies and institutions are not themselves objects of study. Finally, though musical theories are invoked, no social, political, or economic theories are.*

B. Explain the historical and cultural contingency of many descriptions and explanations of human behavior, institutions, systems, and processes.

Musical traditions do not take place in a vacuum. We will explore how Western music has been shaped by cultural and social forces as it has developed. Students will be asked to identify musical pieces by the historical era in which they were produced (Ancient, Medieval, Renaissance, Baroque) and talk and write about their typifying characteristics.

*The proposer gets the idea of this learning goal, but the language is general ("cultural and social forces") and so the committee would not be able to discern how students would come to understand societies and institutions. No social institutions are mentioned.*

C. Evaluate social, political, or economic theories by applying them to local and global phenomena.

Each musical era produced its own musical theories, in response to—and often against—those of preceding eras. We will pay particular attention to the ways that instrumentation and technological advances both shape and are shaped by musical theory.

*The justification makes no mention of social, political, or economic theories. It's possible the proposer is thinking of music theory in one or more of these terms, but that is not made clear. And once again, we get little indication of what students will **do** in this course.*

C. **Analyzing and Using Data**

This is a fictional course on Perceptions of Higher Education in Society course. One of the requirements of the course is a series of surveys that the students design and send out to different constituents, asking their opinions on aspects of higher education. *Though it does provide opportunities for students to generate data in an organized manner, the course lacks sufficient rigor to serve as the students' sole course in this NUpath category.*

A. Describe how data may be acquired, stored, transmitted, and processed.

Students will select a "focus" demographic (e.g., by location, shared interest, or background) to question via surveys, to gain insight into their perceptions of several aspects of local, national and global higher education. They will understand the handling and confidentiality of identifying factors, where applicable. They will also use best practices in question and Likert scale construction. Questions will range from aspects of preparation, admissions, finances and preparedness for employment and/or society.

*This satisfies A. . **Note: Proposals fail if students do not have the opportunity to meet one or more of the learning goals.*

B. Analyze at least one important type of data and summarize the results of an analysis in ways that provide insight.

Over large groups, students will generate mean, median and mode of responses. They will compare these results across different representative groups.

*This is a very basic practice, and many students would have learned these techniques in high school. This does not satisfy B.*

C. Use mathematical methods and/or computational tools to perform analysis.

Students will use spreadsheet tools (e.g., Excel) to calculate key aspects of data.

*Similar to B: This is a very simple approach. Typically, unless a course specifically calls out higher functions in a spreadsheet program like Excel, it will not be approved for this category.*

D. Evaluate and critique choices made in selection, analysis, and presentation of data.

In in-class presentations, students will present their data as part of a larger argument comparing attitudes of people across different constituencies. Peer-peer feedback after each presentation will education students into which method of data visualization (e.g., pie charts, bubble plots, etc.) is most effective for conveying different arguments.

*This only partially satisfies D. While it is useful for students to learn about visualization and presentation, unless rigorous analysis is performed, this is not sufficient for this category.*

D. **Engaging Differences and Diversity**

This is a fictional course on Food, Eating Behavior, and Culture. *The course content, readings and activities emphasize the physiological and biochemical processes around food and eating behavior rather than the ways food and eating behavior shape and are shaped by human difference. There is no indication that students will learn about theories of human difference or even that they will study food and eating as social and cultural phenomena.*

A. Describe how notions of human difference have changed over time and across local and global contexts.

Students will interview an individual with a difference cultural background from their own to do a 24-hour dietary recall of a week day and a weekend day to ascertain food choices and patterns.

*It is unclear how students will use this information to study notions of human difference or how those notions have changed over time and across contexts.*

B. Discuss the value in recognizing, respecting and embracing human diversity, and how diversity contributes to culture and society, including civic sustainability.

Using the class material, students will study food and eating behavior among different cultural groups to determine how food choice and eating behavior influences physiological and biochemical processes.

*The proposer invokes cultural differences, but the focus seems to be on nutrition rather than the ways food and eating are cultural and social phenomena. Also, "using the class material, students will study" is vague; what exactly are the students doing?*

C. Evaluate and compare two or more theories of human difference, and approaches to cultivating and leveraging diversity.

Students will be asked to conduct a 24-hr dietary recall (weekday and weekend day) on themselves and compare it to the 24-hour recalls of their interviewee (see A).

*This exercise does not involve students in evaluating and comparing theories of human difference, and once again it falls short of engage students in the study of cultural and social determinants of food choice in diverse populations, including attitudes, beliefs and knowledge.*

D. Connect theories of human difference and approaches to diversity to one's own experience.

Students will be encouraged to summarize and analyze their experiences with food and how the course has changed their perspectives.

*This justification makes no mention of theories of human difference.*

E. **Employing Ethical Reasoning**

This is a fictional course focusing on Human sacrifice in Mesoamerican Culture. *Although the course is focused on a topic that has a number of important ethical ramifications, it offers students insufficient opportunities to learn about ethical theories or engage in ethical reasoning.*

A. Describe the moral and ethical elements of an issue, problem, or situation.

Human sacrifice is in itself a profoundly moral question. Throughout the class material including modern scholarship, original accounts, and archeological artifacts, this course will provide an understanding of the role of these practices in Mesoamerican cultures.

*Students are clearly learning about practices that are related to ethical debates, but they are not focusing on these debates. The justification also describes what the course will do ("provide an understanding"), rather than what students will do.*

B. Explain at least two key ethical theories.

Students will examine the main proposed explanations for human sacrifice within Mesoamerican cultures including ecological explanations, religious explanations, and political explanations. Students will discuss these different explanations in class, and produce a research paper confronting these different explanations.

*There is no indication here of any ethical theories being introduced, described, or used as a framework for analysis.*

C. Apply ethical theories to moral dilemmas and personal positions.

Mesoamerican cultures provide a useful context for examining the influence of social, historical, political, and ecological influence on practices that have a moral and ethical dimension. These same factors may influence modern personal, professional, social, political, historical or economic questions and situations.

*This justification makes no mention ethical theories being discussed or used to conceptualize moral dilemmas.*

F. **Writing Across Audiences and Genres**

This is a fictional course on Social Stratification. *While there is some writing in this course, students do not study and practice writing for multiple public, academic, and professional audiences and contexts. The proposer, perhaps thinking it's enough to make students write a lot, makes little effort to respond directly to the learning goals.*

A. Adapt writing for multiple academic, professional, and public occasions and audiences.

Students research and write about the causes and consequences of economic and social inequality in various regions of the United States. They write a proposal and a literature review separately, and then they write a 15-20-page paper.

*The proposer does not address the occasions and audiences for student writing.*

B. Develop facility with genres of their chosen academic field and profession.

Students will learn to write social science papers in the typical format: title page, abstract, short introduction, literature review, methodology, findings, discussion, conclusion, and references (APA style).

*This justification may pass muster with the committee, but it's unclear how students will learn to write these papers.*

C. Identify credible, relevant sources and engage meaningfully with them in their writing.

Students will work from a list of scholarly sources provided to them by the instructor and will be have to write "with the grain" and "against" the grain of the arguments scholars make.

*The "with/against the grain" strategy suggests that students will learn to engage meaningfully with sources in their writing, but because the sources are provided to students, it's hard to see how they will learn to identify credible, relevant sources.*

D. Demonstrate control of writing conventions, including citation standards and mechanics.

As mentioned above, student papers will follow a set structure, with all the parts of a typical social science research paper.

*Stating that students will be held to a tight script does not help the committee understand how students will learn to demonstrate control of writing conventions.*

G. **Integrating Knowledge and Skills Through Experience**

This is a fictional studio design course. *While it engages students in experiential learning, it does not meet the criterion that the learning take place in new and authentic contexts beyond the classroom or campus. Students do not engage in sustained ways with individuals beyond faculty and classmates or in contexts outside of classrooms. Bringing experts to the classroom can expand learning and mimic the design studio/office, but that is not adequate as a new and authentic context.*

A. Apply knowledge and skills in new, authentic contexts.

Working in teams, students will research, frame, design, and implement a project that encourages audience interaction. Students will create a visual synthesis of their project process for campus display.

*The display of the resulting solutions within a gallery on campus is not the same as sustained dialogue, workshops, and presentations with the identified community/context.*

B. Gain new knowledge and develop new skills to successfully engage in unfamiliar tasks and activities.

Students will present their work-in-progress to experts from the design field in a classroom setting and receive feedback for iteration and improvement.

*While bringing stakeholders and experts to the classroom offers valuable perspectives and exchange, it does not offer students the direct experience of an unfamiliar setting and contextual exchanges.*

C. Integrate and use the deepened knowledge and skills as well as the newly gained knowledge and skills to continue to learn in their academic programs.

Students will study ethnographic research methods and write a report on best practices of one of the methods used.

*This justification is not responsive to the learning goal. It is not clear what the "deepened knowledge and skills" and "newly gained knowledge and skills" are and how students will be asked to integrate and use them in the context of their academic programs.*

D. Articulate how and what one learns across a range of contexts.

Student teams will each chose a distinctive audience, need, and context and share process with class.

*This justification does not outline the new and authentic contexts that students will traverse.*

## H. Demonstrating Thought and Action in a Capstone

**Learning goals for Capstones are determined by the unit offering them.

# Exemplary NUpath Justifications

**See Exemplary NUpath Justifications Excel file.