



NATIONAL ENDOWMENT FOR THE

Humanities

DIVISION OF EDUCATION PROGRAMS

Narrative Section of a Successful Proposal

The attached document contains the narrative and selected portions of a previously funded grant application. It is not intended to serve as a model, but to give you a sense of how a successful proposal may be crafted. Every successful proposal is different, and each applicant is urged to prepare a proposal that reflects its unique project and aspirations. Prospective applicants should consult the program guidelines at <http://www.neh.gov/grants/education/enduring-questions> for instructions. Applicants are also strongly encouraged to consult with the NEH Division of Education Programs staff well before a grant deadline.

The attachment only contains the grant narrative and selected portions, not the entire funded application. In addition, certain portions may have been redacted to protect the privacy interests of an individual and/or to protect confidential commercial and financial information and/or to protect copyrighted materials.

Project Title: NEH Enduring Questions Course on the Nature of Life

Institution: Lawrence University of Wisconsin

Project Director: Martyn Smith

Grant Program: Enduring Questions

Enduring Questions: What is Life?

I. Intellectual Rationale and Teaching Value

The question to be examined in my proposed course is “What is Life?” This is not a shorthand way to ask about “the meaning of life” or “the good life.” I mean something more basic. My question arises from the fact that human beings are surrounded by things that sense and grow and reproduce and die. We feel ourselves to be a part of this biosphere. The presence of Life is an elemental fact engaging human beings and spurring them to inquiry. The naturalist Alexander Von Humboldt writes at the start of an essay: “When a person possessed of an active mind explores Nature... no single one among the manifold impressions that occur to him has so deep and powerful an effect as that of the ubiquitous abundance of life.” Life has similarly stirred deep religious reflection. In the opening revelation of the Quran the fact of Life is highlighted as the preeminent miracle: “[God] created man from a clinging form.”

This primary question opens up a number of secondary questions: How should human beings understand their participation in the biosphere? Should human connection or disconnection to other living things be emphasized? Do we as human beings have a responsibility to preserve the diversity of Life? And, finally, is there common ground between scientific and religious responses to Life? We will pursue these questions through a course that emphasizes reading from primary texts and direct observation of Life. The course will be divided into four sections, which represent four overlapping vantage points for thinking about Life. Each section of the class will feature a visual component to further develop and deepen the theme.

The first section is Life as Mystery. We begin with the Biblical account of creation in Genesis and related readings from the Quran. In these texts Life is viewed as a miracle for which God is the only possible source. Lesser known creation myths from Africa will be introduced to

make clear that this is not merely a characteristic of the Judeo-Christian-Islamic tradition, but a widely shared human response of marvel and wonder. For the visual component I will introduce students to Paleolithic art in which human beings depicted living creatures and left outlines of their hands on cave walls, asking them to consider the view of the biosphere inherent in these images.

The second section is Classification of Life. The creation accounts mentioned above have already begun classifying Life, but when we reach Aristotle this has become a dominant concern. The main text for this section will be Aristotle's *De Anima* (4th century BC). The usual translation of *De Anima* is "On the Soul," but the theological implication is misleading, and Aristotle himself says in the first paragraph: "...the soul is in some sense the principle of animal life." By means of a distinction in levels of soul (rational, perceptive, nutritive) Aristotle finds a way to order and classify forms of Life. Selected chapters from the medieval Arabic text *The Case of the Animals versus Man before the King of the Jinn* (10th century AD) will point to the way in which Aristotle's views on life were elaborated in later centuries.

The third theme is the History of Life. This third section will consist of an intensive reading of Charles Darwin's *Voyage of the Beagle* (1839) along with selections from the *Origin of Species* (1859). For comparison we will also look at selections from the *Malay Archipelago* (1869) by the co-discoverer of evolution, Alfred Russel Wallace. In these works of travel and science students will discover obvious contrasts to the previous sections, but also surprising overlaps, such as the way Life stirs a sense of awe and the proposition that all Life is truly connected. For visual material we will examine the beautiful prints of German evolutionary theorist Ernst Haeckel illustrating microscopic radiolaria (1887).

The class will culminate with the theme Life as Challenge for the modern world. We will

read two books by contemporary women. The first is the classic *Pilgrim at Tinker Creek* (1974) in which Annie Dillard sets out to observe the details of the natural world and reflect. The second book is *The Sixth Extinction* (2014) by Elizabeth Kolbert. This last book points to the real danger that human beings will eviscerate the diversity of Life. These two books will spur students to think about the value of Life as a source for personal renewal and to consider for themselves the call for active engagement to preserve the diversity of Life.

The question “What is Life?” allows for a pluralistic approach that refuses to engage in long-standing conflicts such as Creation vs. Evolution. The course includes texts from diverse fields of inquiry, yet students will be struck by their interconnectedness. For example, in Aristotle’s *De Anima* we witness in the first book how philosophical reflection on Life emerged directly from earlier religious explanations for Life. The wonder with which Darwin experiences Life in the tropics during his Beagle voyage is similar to the awe at Life expressed in a religious text such as the book of Job.

Lawrence University is a liberal arts college with a commitment to cross-disciplinary learning. This commitment is present right from the start as each student takes Freshman Studies, which includes readings from the sciences such as essays by Stephen Jay Gould, along with works drawn from the humanities and arts. I have taught Freshman Studies nine times, and this has given me a great deal of experience teaching science texts alongside ones from the humanities.

Lawrence actively supports attempts to mix the humanities and sciences, a recent example being the class “Newtonian Lit” team-taught by an English and Physics professor. My proposed course fits well with these efforts to bring together the intellectual questions of the sciences and the humanities.

II. Course Design

Mid-level and advanced students in both the humanities and the sciences will encounter a new perspective in this course. Biology is the largest major at Lawrence, and one standout part of our major is the speed with which students are engaged in active research. What can be missed with this emphasis on research is a sense of the history of a discipline. On the other hand, students in the humanities will encounter scientific works that do not turn up in their courses. The course will be listed within my own religious studies department, but it is common that my courses at the 200 level attract students from a wide range of departments. Since Lawrence is on a term system, the course will last 10 weeks, and it will work best on a Monday/Wednesday/Friday schedule. I will limit the course to about 20 students so as to enable the kind of outdoor experiences I will describe shortly. The readings from primary texts will vary in length, but will range from 30 pages per class period for a dense text such as that of Aristotle to around 100 pages per class period for Darwin's *Voyage of the Beagle* (average of 200 pages per week).

The major assignment for the course will be an ongoing journal containing reflections on class readings and their own outside-of-class exploration of Life. This journal will be the basis for a final polished narrative (15 pages) that takes as its model the writings of Darwin, Wallace, and Dillard, who each kept careful journals and then re-worked them for later publication. Our campus lies along the Fox River of Wisconsin, where bald eagles, pelicans, herons, and other birds can often be observed, not to mention many nearby lake and pond environments brimming with aquatic and insect life. From campus students can easily walk along a trail that follows the Fox River and nearby there are several nature preserves. During the fall term (when this course will be offered) I will lead two nature walks in which students learn together how to spot interesting things, whether birds, insects, plants, or aquatic life. I will model for them how to locate answers to the

questions that arise from these short trips through consulting a guide or other reference work.

III. Course Preparation

Many aspects of this proposed course overlap with my developed teaching interests. I am chair of the religious studies department, my specialty being Islam. I teach a course on the Quran as well as one on the Hebrew Bible, so I am well prepared to teach religious texts related to these traditions. I also teach a course entitled “Greek and Islamic Philosophical Tradition” in which students read, among other things, Aristotle’s *De Anima* and later Arabic philosophers.

No doubt the biggest challenge for me in this course is presentation of the scientific material. I have read the works of Darwin and have long been interested in questions as to how evolution should shape the study of religion, yet to effectively teach Darwin and related material I am conscious of the need for a stronger background in the life sciences. Likewise, though I have an amateur interest in birds, insects, and other forms of Life, I will need to confidently lead outings in which I help students identify and observe whatever plants and animals we encounter.

The stipend I receive for this Enduring Questions grant will enable me to take a term of sabbatical in fall 2015. During this sabbatical time I will take two biology courses at Lawrence. I have spoken with the chair of the biology department Dr. Beth De Stasio and she enthusiastically supports this idea. In addition I am asking for funds so that during the summer leading up to my fall sabbatical I can take a series of summer seminars at the UW Milwaukee field station near Cedarburg Bog, which include topics such as “Field Herpetology: Identification of Wisconsin Amphibians and Reptiles” and “Vegetation of Wisconsin.” These two- to five-day long seminars will strengthen my ability to lead outdoor walks with students even as the biology courses will give me the technical vocabulary to talk about the life sciences. I have also budgeted for

textbooks, field guides, and reference works that will be related to these seminars and college courses.

The timeline for my preparation of this course is straightforward: May 1, 2015: beginning of grant period; Summer 2015: I take summer seminars at the UW Milwaukee field station; I also buy books related to these seminars; Fall 2015: I take two classes through the biology department at Lawrence University during a sabbatical term; Summer 2016 I prepare the syllabus and finalize readings for the course; I take up to two more seminars at field station; Fall 2016: the course “What is Life?” is offered for the first time, and then subsequently in Fall 2017. I expect this to become an annual course and to serve as a bridge between the sciences and humanities.

In terms of dissemination, there is great interest now at Lawrence in innovative approaches to the humanities. The University recently received a large NEH challenge grant for the founding of a Humanities Institute. I have been on the planning committee for this institute, which will begin next year. I will propose we adopt as theme for one year the relationship of the humanities and sciences. The Humanities Institute would then hire a postdoc fellow whose work relates to this topic and instigate a series of readings among faculty that will serve as a way to focus attention on this topic. This course also represents a genuine experiment in linking science and my own field of religious studies. I will seek to present on this topic for the “teaching religion section” at the annual meeting for the American Academy of Religion, which will be in San Antonio for 2017. The final budget item for this grant is for funds to travel to this meeting, which will expose this course and the philosophy behind it to other educators.

Enduring Questions: What is Life?

Course Readings

Section 1: Life as Miracle

Genesis and Job from the Bible

Section 2: Classification of Life

De Anima by Aristotle

The Case of the Animals versus Man before the King of the Jinn, Brethren of Purity

Section 3: History of Life

Voyage of the Beagle by Charles Darwin

Section 4: Challenge of Life for the Modern World

Pilgrim at Tinker Creek by Annie Dillard

The Sixth Extinction by Elizabeth Kolbert

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