

Form NP

NEW DEGREE PROGRAM PROPOSAL

Sponsoring Campus: University of Missouri-Columbia
Program Title: Philosophy
Degree: Bachelor of Science
Option: NA
CIP Classification: 38.0101
Emphasis areas: None
Implementation Date: June, 2013
Cooperative Partners None
Expected Date of First Graduation: May, 2014

Authorization

 Senior Associate Vice President for Academic Affairs
Name/Title of Institutional Officer Signature Date

Steve Graham, Senior Assoc. Vice President for Academic Affairs 573-882-6396
Person to Contact for More Information Telephone Number

Introduction

The proposal is for MU's Department of Philosophy to be permitted to offer to exceptional undergraduate students a new credential: a BS in Philosophy. The academic requirements for the proposed degree will be more demanding than those for the existing (and continuing) BA in Philosophy, and will emphasize logic and the philosophy of science.

Students who graduate with this degree will be eligible to pursue the following career paths:

- any career that requires the traditional virtues of a good philosophy major—e.g., excellent written and spoken communication skills, the ability to analyze complex problems—together with a deep understanding of how science works;
- for especially gifted philosophy majors, admission into prestigious PhD programs in Philosophy that emphasize logic and the philosophy of science.

The idea for a BS in Philosophy arose because MU's Philosophy Department has recently hired new faculty with expertise in various sub-areas of the philosophy of science, e.g., philosophy of biology, philosophy of psychology, and the foundations of decision and game theory; the proposed program will exploit this new expertise.

No preliminary steps have been taken toward the proposed degree. However, the proposed degree will only involve courses that are already in MU's Undergraduate Catalog and faculty who already belong to MU's Philosophy Department.

Responsibility for the proposed program will lie with the Philosophy Department and in particular its Director of Undergraduate Studies, who is currently Dr Philip Robbins. No program director will be needed.

2. Fit With University Mission and Other Academic Programs

2.A. Alignment With Mission and Goals

First, MU's [mission](#) is as follows:

Our distinct mission, as Missouri's only state-supported member of the Association of American Universities, is to provide all Missourians the benefits of a world-class research university. We are stewards and builders of a priceless state resource, a unique physical infrastructure and scholarly environment in which our tightly interlocked missions of teaching, research and service work together on behalf of all citizens. Students work side by side with some of the world's best faculty to advance the arts and humanities, the sciences, and the professions. Scholarship and teaching are daily driven by a sense of public service—the obligation to produce and disseminate

knowledge that will improve the quality of life in the state, the nation and the world.

The proposed program will provide—at no additional cost to the university—an opportunity for the ablest students at MU to acquire a prestigious new credential that will help them to pursue successful and worthwhile careers.

Second, according to MU's *Eighth Report on the Strategic Planning Process*, [Strategic Initiative One](#) is to

Enhance and expand MU's position as a destination university, an outstanding AAU institution to which faculty, staff, and students worldwide are attracted and retained because of a stimulating intellectual environment, leading edge programs, and world-class colleagues.

Given the MU Philosophy Department's growing strength in the philosophy of science, the proposed program will contribute to achieving this objective.

Finally, MU has developed an acknowledged strength in the life sciences, broadly interpreted to include, for example, anthropology and psychology. The College of Arts and Science has played an important part in this development. With the support of the College, the Philosophy Department has over the past five years added several new members whose research pertains to the life sciences and science in general. These new faculty, together with long-time faculty members, mean that the Department now has considerable expertise in the philosophy of science. The BS degree will harness this pre-existing research expertise in the service of undergraduate education.

2.B. Duplication and Collaboration Within Campus and Across System

The proposed program does not duplicate any existing program within the UM System or the wider system of public universities in Missouri. (Missouri State University's Philosophy Department offers a [BS degree](#), but the philosophy requirements for this degree do not differ from those for the BA degree.)

Washington University in St. Louis has just begun to offer a [Philosophy of Science Track](#) for students pursuing a major in Philosophy. This track is similar in spirit to the program being proposed here, but it differs in three significant ways:

1. Washington University's Philosophy of Science Track "is available only as a second major in combination with work in one or more of the sciences", whereas the BS in Philosophy being proposed here can be pursued as a *single* major.

2. Washington University's Philosophy of Science Track requires just 27 credits in Philosophy, whereas the BS in Philosophy being proposed here will be more intensive, requiring 42 credits in Philosophy (see Section 5.B below).

3. For obvious reasons, Washington University's Philosophy of Science Track can never allow for the broad student access that a program at MU can.

Although relations between MU's Philosophy Department and that of Washington University are very cordial, collaboration with regard to its Philosophy of Science Track is not a part of the current proposal. It should not be ruled out for the future, however.

3. Business-Related Criteria and Justification

3.A. Market Analysis

3.A.1. Need for Program

Contrary to the popular view of Philosophy as conferring no practical benefit, there is good reason to expect that graduates of the proposed program will find remunerative employment in jobs that meet Missouri's economic needs.

The practical value of studying Philosophy lies not in any vocation-specific information that it imparts but rather in the intellectual training that it provides. Successful study of Philosophy requires, and helps develop, several intellectual abilities and dispositions:

- the ability to construct an effective case for a view or course of action
- the ability to identify assumptions in the arguments made by others
- the disposition to question the assumptions of others
- the ability to think about highly abstract and conceptually demanding questions (e.g., those in the law)
- the ability to speak and write about such questions clearly and precisely
- the ability to notice conceptual distinctions that others may not see
- intolerance for woolly-mindedness
- the ability to analyze complex problems
- the ability to assess the pros and cons of proposed solutions
- the ability to grasp the big picture as well as fine details

These abilities and dispositions are transferable to, and valuable in, a wide variety of careers, the best-known example of which is law. According to a [recent paper](#), with regard to average LSAT scores for 2007—2008, "Economics majors (LSAT score of 157.4) are tied for first (with Philosophy) of the 12 largest disciplines (those with more than 1,900 students entering law school)". [Older data](#)—from 1991-2 and 1994-5—reveal essentially the

same picture, though with Philosophy edging out Economics. More surprisingly, it [turns out that](#) the average score of Philosophy majors on the GMAT for 2000-1 to 2004-5 exceeded that of all other majors (including all Business majors) except Engineering, Mathematics, and Physics. Finally, [according to the Association of American Medical Colleges](#), in the class entering US medical schools in 2000-1, the acceptance rate for students who had majored in Philosophy was 60.2%, an acceptance rate higher than that for all majors in the Biological Sciences, and all majors in the Physical Sciences except for Biomedical Engineering (65.3%).

These transferable abilities and dispositions are also valuable for students who do not take any higher degree. According to [PayScale's 2010-11 College Salary Report](#), the mid-career median pay of someone whose only degree is a BA in Philosophy is \$72,900. While this figure is by no means the highest of all majors surveyed, it is higher than the figures for many majors, including Biology, Communications, Business, Nursing, Hotel Management, English, Forestry, Multimedia and Web Design, Psychology, Animal Science, Interior Design, Education, Religious Studies, and Social Work.

Students who successfully pursue the proposed BS in Philosophy will possess these valuable abilities and dispositions, but they will *in addition* have competence in formal reasoning and a deep understanding of the process by which science generates knowledge of the world. Their employment prospects will only be enhanced by these additional competences, especially in a world where it is increasingly important for laypeople to be able to understand and evaluate scientific controversies that bear upon daily life.

This conclusion is reinforced by the document, *Missouri Skills Gap 2008* (downloadable [here](#)), which reports results of the Missouri Job Vacancy Survey. Missouri employers responded that for 51% of vacancies for jobs requiring a bachelor's degree applicants exhibited poor communication skills, for 25% of such vacancies the applicants exhibited poor writing skills, and for 23% the applicants exhibited an inability to understand written information.

3.A.2. Student Demand for Program

The evidence for thinking that student demand for this program exists is as follows.

- We know from past experience that every year a few philosophy majors decide to seek admission to graduate programs in Philosophy. They understand that competition at the top programs will be keen, and that they need to strengthen their applications in every way they can. These students may therefore appreciate the proposed BS in Philosophy.

- Faculty advisers' conversations with prospective Philosophy majors reveal that some students are deterred from majoring in Philosophy by the foreign language requirement that the BA in Philosophy includes; the proposed BS in Philosophy does not, however, require a foreign language.
- Increasingly, students become interested in Philosophy through being exposed to conceptual issues that arise in science, perhaps having read popular books by such authors as Richard Dawkins, Steven Pinker, and Daniel Dennett. Such students may also be attracted by the proposed BS in Philosophy.

This evidence is hardly conclusive; so it is important to keep in mind that the proposal for a BS in Philosophy is merely a request to offer a new credential; it is not a request for a cent of extra money. As explained in Section 4 below, implementation of the proposed program will use only existing resources.

The same point applies to the projections in Table 1, which are merely speculations based on the informal considerations above. As for how many of the students projected to be enrolled would be new to campus, nothing can responsibly be said except that there might be some. Note, however, that it is unusual for students to come to MU already planning to major in Philosophy, because it is only rarely offered in high schools.

**Form SE
STUDENT ENROLLMNET PROJECTIONS**

Student Enrollment Projections Based on Market and Student Demand

Year	1	2	3	4	5
Full-Time	1	2	3	4	5
Part-Time	0	0	0	0	0
Total	1	2	3	4	5

**Enrollment at the End of Yr. 5 for the Program to be
Financially & Academically Viable**

Enrollment Status	Full-Time	Part-Time	Total
Number of Students	5	0	5

3.B. Financial Projections

The BS degree will neither generate nor require additional funding since it will make use of current faculty and courses already being taught.

3.B.1 Additional Resources Needed

Because the BS degree will simply redeploy existing assets, such as faculty and courses, no additional resources will be needed.

3.B.2. Revenue

The BS degree in philosophy is not expected generate any new revenue.

3.B.3. Net Revenue

Since the BS degree in philosophy has no additional revenue or costs associated with it, there will also be no net revenue.

3.C. Business and Marketing Plan: Recruiting and Retaining Students

The following initial steps to market the proposed program will be taken by the Philosophy Department's Director of Undergraduate Studies, Dr Peter Vallentyne:

- Current Philosophy majors will be informed by email of the new degree program and its advantages.
- The Philosophy Department's annual newsletter will inform the wider campus community, the wider philosophical community, and alumni.
- The program will be described in detail and highlighted on the Department's web-site.
- The MU Undergraduate Catalogue will be revised appropriately.
- Undergraduate advisers and directors of undergraduate studies across campus will be informed of the new program and visited by Dr Robbins if they are willing.
- Special efforts will be made to inform Honors College advisers of the new program.
- MU publications at the college and campus levels, both on-line and traditional, will be supplied with suitable information and asked to announce the new program.

As the new program grows, information about it will be a standard component of all materials that describe what MU's Philosophy Department has to offer. In time, testimonials from successful graduates of the program will strengthen the case that can be made for participating in the program.

There will be no costs entailed by marketing the proposed program, since the time of the Director of Undergraduate Studies is already paid for.

The Philosophy Department does not anticipate any problems with retaining students who choose to participate in the program, since, given the rigor of the program, only highly motivated students will have done so in the first place.

The success of the proposed program depends on whether it turns out to offer what a sufficient number of students want; and the only way to tell whether it does is to make the experiment and try it. But because no new resources are required for the program—it requires only the reordering of pre-existing resources—the risk for MU is close to zero.

4. Institutional Capacity

Implementation of the proposed program will use only existing resources, and because we are anticipating that it will lead to a net increase of just five to ten new philosophy majors, the burden on existing resources will be very small.

Students who choose to pursue the proposed BS in Philosophy will have to fulfill the standard general education requirements for a BS degree in the College of Arts and Science at MU. They will also have to fulfill the standard Philosophy requirements of a BA in Philosophy at MU. Given the very large increases in undergraduate enrollment that MU has successfully absorbed in the past few years, accommodating these few students will cause no difficulty.

Finally, students who choose to pursue the proposed BS in Philosophy will have to take any four from a list of seven further Philosophy courses that fall into the category of Logic and Philosophy of Science. These further courses are already in the Undergraduate Catalog, and have been offered in the past. The Philosophy Department will simply continue to offer them. The only effect of the BS program, if approved, is that a few more seats in them will be taken.

Implementation of the proposed program will therefore in no way diminish the Philosophy Department's commitment to its existing BA program or to the key role that the Department plays in MU's general education program.

Form PG

PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

5. Program Characteristics

5.A. Structure

To complete the proposed BS in Philosophy, a student must

- I. Meet the general education requirements for a [BS degree in the College of Arts and Science at MU](#).

II. Either meet the foreign language requirement for the BA degree in the College of Arts and Science at MU (i.e., 12-13 credits in a single language) or earn twelve credits in courses at the 2000-level or higher in any of the natural sciences, Mathematics, Psychology, or Economics. (Courses selected for the second option must be approved by the Philosophy Department's undergraduate advisor.)

III. Meet the Philosophy Department's philosophy requirements for a BA in Philosophy.

A. Take, for a total of 30 credits in Philosophy,

- PHIL 2700: Elementary Logic;
- At least one of the following: PHIL 1100: Introduction to Ethics
PHIL 4600: Political Philosophy
PHIL 4500: Theories of Ethics;
- Both of the following: PHIL 3000: Ancient Western Philosophy
PHIL 3200: Modern Philosophy;
- At least one of the following: PHIL 4100: Philosophy of Language
PHIL 4200: Metaphysics
PHIL 4210: Philosophy of Mind
PHIL 4300: Epistemology
PHIL 4400: Philosophy of Science;
- PHIL 4950: Senior Seminar;
- At least two further 4000-level courses in addition to those taken to fulfill the requirements above;
- Six credits of elective Philosophy courses.

B. Observe the following restrictions:

- No course may be used to fulfill more than one of the above requirements (i.e., no double-dipping is allowed).
- No more than two courses below the 2000-level may count toward the major.
- No course may count toward the philosophy major unless the grade is C or higher.

IV. Take, in addition, four Philosophy courses from the following list, earning a grade of C- or higher:

PHIL 2600 Rational Decisions
PHIL 2820 Introduction to Cognitive Science
PHIL 4110 Advanced Logic
PHIL 4120 Selected Topics in Logic

PHIL 4130 Probability and Induction
PHIL 4400 Philosophy of Science
PHIL 4420 Philosophy of Biology.

V. Take additional elective courses sufficient to reach a grand total of 120 credits.

5.B. Faculty and Administration

The individual responsible for the proposed BS in Philosophy will be the Philosophy Department's Director of Undergraduate Studies, currently Dr Philip Robbins. Once the program is up and running, however, it should require none of his time at all. A student who wishes to pursue the BS in Philosophy will first need to meet with the Department's Undergraduate Adviser to take care of the paperwork, and may of course return for further advisement at any future time. The Department Chair will schedule the appropriate courses for the BS as a matter of routine, and individual members of [the Department's regular faculty](#) will teach them as part of their regular course loads.

Students who pursue the BS in Philosophy can expect to earn at least 85% of their credits in Philosophy from courses taught by full-time regular Philosophy Department faculty.

5.C. Student Preparation

There are no special admissions procedures or student qualifications required for this program beyond those required for regular university admission.

However, students should pursue the BS in Philosophy only if

- They have shown exceptional aptitude and enthusiasm for the discipline in earlier Philosophy courses; and
- They have a serious interest in some branch of science and in reflection on science in general.

The Philosophy Department expects there to be few such students.

5.D. Program Outcomes

Graduates of the program should have

- Competence in elementary, and perhaps advanced, symbolic logic;
- Knowledge of the thought of the main figures in ancient western and modern Philosophy;
- the ability to discuss, in an intelligent and informed way, the pros and cons of competing answers to central questions in contemporary ethics;

- the ability to discuss, in an intelligent and informed way, the pros and cons of competing answers to central questions in at least one of the following areas of contemporary philosophy: epistemology, metaphysics, philosophy of language, philosophy of mind, and philosophy of science;
- the ability to discuss, in an intelligent and informed way, the pros and cons of competing answers to central questions in two further areas of contemporary philosophy, these areas to be chosen by the students;
- the ability to discuss, in an intelligent and informed way, the pros and cons of competing answers to central questions in at least four of the following areas of contemporary logic and philosophy of science: foundations of decision theory, philosophy of psychology, advanced logic, confirmation theory, general philosophy of science, and philosophy of biology.

Graduates of the program should also have

- The ability to construct an effective case for a view or course of action;
- The ability to identify assumptions in the arguments made by others;
- The disposition to question the assumptions of others;
- The ability to think about highly abstract and conceptually demanding questions (e.g., those in the law);
- The ability to speak and write about such questions clearly and precisely;
- The ability to notice conceptual distinctions that others may not see;
- Intolerance for woolly-mindedness;
- The ability to analyze complex problems;
- The ability to assess the pros and cons of proposed solutions;
- The ability to grasp the big picture as well as fine details.

The final item on the first list is specific to the BS as opposed to the BA in Philosophy.

5.E. Program Design and Content

The program was designed with a view to taking a distinctive research strength of the Philosophy Department and turning it into something unique (in Missouri) for undergraduate students. We found that we *already* had the curriculum for a BS in Philosophy. The proposed program uses only courses that are already in the Undergraduate Catalog.

The academic requirements for the proposed BS in Philosophy (section 5.A above) do not specify a required order for taking the courses. Still, there is a *recommended* order for taking the philosophy courses, to be communicated to students through advising. The Department recommends beginning with a 1000-level course, e.g., Phil 1100, Introduction to Ethics, then moving on to one or both of the required courses in the history of Philosophy, Phil 3000, Ancient Western Philosophy, and Phil 3200, Modern Philosophy. At around this time students should also take Phil 2700, Elementary Logic. Then, but only then, should students begin to take 4000-level courses.

The main rationale for this recommendation is that introductory courses and courses in the history of Philosophy provide comparatively gentle ways of becoming acquainted with Philosophy and gaining confidence in it before undergoing the rigors of our 4000-level courses. In addition, basic logic is a common tool in contemporary Philosophy; so familiarity with basic logic is very helpful in studying it.

5.F. Program Goals and Assessment

The goal of the proposed program is for students to achieve the learning outcomes listed in Section 5.D. above. The achievement of this goal will be assessed in the traditional way for Philosophy classes, namely, by the evaluation of student performance on essay exams and in the writing of one or more thesis-defense papers. (The Philosophy Department requires that all upper-level undergraduate (i.e., 3000- or 4000-level) courses, other than logic courses, include a substantial paper-writing component, typically in the form of one or more thesis-defense papers.)

Sadly, there is no generally accepted external evaluation (e.g., national standardized test) for Philosophy majors. However, success in getting graduates who desire it into top-ranked PhD programs in Philosophy sheds some light on a Philosophy program, and so the Department will monitor the record of placement into such programs by students who graduate with the proposed BS in Philosophy.

The Philosophy Department wants all students who major in Philosophy, and who do not want to go on to further education, to obtain employment with which they are content. Of course, the quality of a Philosophy major's philosophical education is only one factor affecting his or her employability; even in the proposed BS in Philosophy, courses in Philosophy will only constitute 42 out of the 120 credits needed. And factors such as the major's people skills lie entirely beyond the control of the Philosophy Department. Nevertheless, the Department will monitor the job placement record of graduates of the proposed program.

As noted in Section 3.A.2, it is only possible to speculate as to the likely extent of uptake of the proposed program, if it is approved; but the Philosophy Department would be delighted to see *three* graduates of the program per annum after three years and *four* per annum after five years.

5.G. Alumni and Employer Survey

All graduates of MU's College of Arts and Science, regardless of major, are asked to fill out an exit survey after graduation. But the Philosophy Department uses no formal methods for soliciting feedback from its alumni or from the employers of its alumni. Alumni do, however, volunteer [opinions](#) on their philosophical education.

5.H. Program Accreditation

No accreditation is needed for the program and none will be sought.