Today’s college students frequently encounter a fragmented intellectual scene in which disciplinary boundaries are merely artifacts of scholarship and not reflective of actual divisions in nature. Our curricula have been disjointed and eroded by the rise of specialization, departmentalization, and the emergence of voluminous new knowledge. The compartmentalization of atomized knowledge into discrete disciplines has introduced artificial divisions in the pursuit of knowledge and the understanding of reality. A high degree of specialization of faculty is another consequence of the knowledge explosion. This professional atomization mitigates against boundary crossing and the unification of knowledge.

Modernity has provided mankind with proliferating and accelerated knowledge and information that is growing at an ever-increasing rate. The result is a fragmented, overdisciplinary, and overspecialized educational system that emphasizes the reductionistic parts of reality. It is no wonder that we have teachers and students who are highly knowledgeable in one area of study but uninformed about most other areas. Faculty in one discipline find it increasingly difficult to communicate with faculty in other disciplines. In addition, subspecialists from a given area find it hard to be informed or to communicate about each other’s field of inquiry. Fragmentation has resulted in incomprehension for people who are not specialists in a given subdivision.

Disciplinarity implies the existence of diversifiers whose quest is for a specialized, fragmented, reductionistic knowledge of reality. The discipline-based model that has dominated education over the last century has produced much knowledge but has also erected distorting and artificial lines of demarcation. Dividing disciplines into numerous specialties can be inaccurate and misleading.

There is certainly nothing wrong with disciplinary separation based on the development of a specific focus. Because each individual is born with a unique set of potentialities, specialization is here to stay. The integrity of various disciplines needs to be respected. The problem is the tendency to lose sight of the big picture. People suffering from intellectual myopia are apt to make errors that can be detected by individuals familiar with a range of disciplines. In addition, many intellectual, social, political, and practical problems oftentimes require interdisciplinary knowledge. In a complex world there is the need to bring together insights and methodologies
from a variety of disciplines to solve problems. Real-world problems and issues are frequently broader than any single discipline can fruitfully analyze. Specialists should be urged to see their field as part of a wider context and teachers should illustrate the different emphases of various disciplines while demonstrating their inextricable involvement with one another.

There is a serious need for educational unifiers who can integrate knowledge and build bridges within and between various disciplines. We need people whose systematic project is to integrate disciplines and to discover unity. Interdisciplinarians work to produce knowledge that integrates two or more disciplines. They are concerned with the transfer of methods from one discipline to another. Transdisciplinarians propose the unity of intellectual frameworks beyond the disciplinary perspective. They are concerned with that which is, at the same time, between disciplines, across disciplines, and beyond all disciplines. The interdisciplinary and transdisciplinary approaches are indispensable complements to the disciplinary approach. These approaches build on the strengths of the disciplinary model by drawing on appropriate disciplinary insights and then reconfiguring them.

Although specialization is good and necessary, there is also a need for systemic thinking and the synthesis and integration of dispersed and disparate bits of knowledge including the increased information brought about by technological advances. Although technological tools such as the computer can aid in the integration of data, they cannot furnish an underpinning philosophical and moral framework—that is the role of rational human beings.

Information technologies can provide tools to help make connections among disciplines but it is up to context-keeping individuals investigating from a variety of perspectives and at different levels of generality to make connections among seemingly disparate disciplines and to construct the unity, coherence, and value of knowledge. Rational individuals can bring together long-separated fields of inquiry to create new insights and provide big-picture wisdom. The future belongs to synthesists who can build links and collaborative unity between and across artificially disjointed disciplines.

The Unity and Integration of Knowledge

It is very difficult, if not impossible, to draw boundaries between disciplines. Because of the nature of reality, lines between disciplines are actually blurred and permeable. All knowledge is bound together within the limits of our spatially and temporally finite universe. We live in a universe of natural laws that, despite its monumental size, variety, and changeability, is nevertheless orderly and intelligible. Reality as a whole, and the entities that make it up are subject to natural laws. It follows that, in such a universe, boundaries blur, fields intersect and overlap, and connections are amplified as integration becomes the goal of education.

There are many commonalities among disciplines. An induction gained from one class of facts in one discipline may be seen to coincide with other inductions obtained from different classes of facts in other areas. Such redundancy implies structure, information, or knowledge and can be viewed as “negative entropy.” Of course, it should not be surprising that we find conjunction across various disciplines. Explanations of various types of phenomena existing within the same universe should be connected and consistent with one another.

Man develops his potential by accumulating and adding to the knowledge of past generations. Such knowledge expands and accumulates when it is stored in books and other media for the use of future generations. Inventions from writing to the computer have been important devices for storing and recalling accumulated knowledge.
Advances build on progressive developments of knowledge in the past. Whenever we discover something new, that new knowledge is necessarily related to principles that men already knew. Any given item of knowledge requires a prior context of knowledge in order to be grasped by a human being. In turn, that prior context of knowledge is related to another previous context of knowledge, and so on back in time. Any given item of current knowledge is related to mankind’s knowledge as accumulated throughout the ages. Of course, because of division of labor, specialization, and man’s limitations and bounded rationality, all that was required for an item of new knowledge to exist did not and could not exist in any one person’s mind. It is likely that the discoverer of some specific new knowledge has no personal knowledge of much of the great totality of knowledge nor of all the connections required that his grasp of the new knowledge depends upon. However, it requires that the total knowledge that makes possible the next tier of advancement existed somewhere at some time in men’s minds.

A particular datum of knowledge rests on a previous total that has been discovered and on all the connections of knowledge that were required for that one item to be apprehended by a person. The web of knowledge interrelationships is not just at a particular time but exists in a hierarchical manner across the centuries. For a man to understand a new piece of knowledge implies all the knowledge that mankind had to attain in order to get the new bit of knowledge.

Various disciplines analyze and explore different regions of reality. However, after a phenomenon is analyzed and dissected into its component elements, there remains the need for it to be reconstituted back into the totality that is the universe. It is important to have a sense of how each specific discipline fits into the whole.

Disciplines are simply conceptual conveniences or analytical abstractions. They are not fundamental entities. The whole of reality (i.e., the totality of existence) already exists—people do not have to create it.

Because of the nature of reality it is impossible to totally separate subjects when doing analysis. Reality is not a number of compartmentalized separate units. Although we do have to subdivide reality in order to study an aspect of it, we need to reintegrate at the end of our analysis with the added new knowledge. Of course, even when we are analyzing a demarcated subject we will find other branches of knowledge intruding into our “specialized” study. After all, A is A, and it is untidy when we try to break reality into parts.

Because no field is totally independent of any other field, there are really no discrete branches of knowledge. There is only cognition in which subjects are separated out for purposes of study. That is fine for purposes of specialization, but in the end, we need to reintegrate by connecting one’s specialized knowledge back into the total knowledge of reality. We need to think systemically, look for the relationships and connections between components of knowledge, and aspire to understand the nature of knowledge and its unity.

A Major in Political and Economic Philosophy

Students enrolled in Wheeling Jesuit University’s Political and Economic Philosophy (PEP) major experience a program that both defies the way most universities prepare undergraduates while at the same time embraces the classical concept of education as practiced by Aristotle. In fact, political science and political philosophy as practiced by Aristotle come close to what is being proposed by this major.
WJU’s concept of offering a wholeness in undergraduate education runs counter to the way many universities prepare students. This approach is not found in most of the nation’s great universities. The methodology of the Political and Economic Philosophy major runs counter to and challenges deeply entrenched tendencies toward separation, specialization, professionalization, and autonomous development of the human disciplines of political science, economics, philosophy, law, sociology, theology and history. The kind of approach that crosses a number of disciplines is critical in today’s multi-faceted world—a world that is dominated by the fragmentation of knowledge.

The interdisciplinary and transdisciplinary major in Political and Economic Philosophy at Wheeling Jesuit University provides extensive grounding in each of these analytically distinct but interrelated areas and in many others with which they interact. Emphasis is placed on the historical, methodological, and theoretical interconnections among the various fields of study. Students learn that there are common roots and natural affinities among Politics, Economics, and Philosophy. It becomes obvious to them that these three disciplines are closely linked because of their focus on human reason and on the organization of human interaction.

PEP encompasses the core concepts and essential principles that shape society. It is the disciplines of PEP that provide the intellectual foundation for exploring social problems and for policy analysis and development. The major enhances students’ abilities to independently and critically evaluate competing arguments regarding political and economic events, ideas, and institutions. Students are expected to evaluate and think through for themselves philosophical arguments and positions and to present their rationally defensible conclusions in a clear and organized manner.

The PEP program culminates in a senior seminar and thesis that integrates the students’ previous coursework. Faculty members from each of the three disciplines participate in the seminar. The senior research project provides an experience requiring students to draw together their work in the various areas and to apply their detailed knowledge of the interrelations between the disciplines of the major. PEP majors are encouraged to explore questions without regard to contemporary disciplinary boundaries that were unknown to seminal social thinkers such as John Locke, Adam Smith, and John Stuart Mill who at various times, and often concurrently, acted as philosophers, economists, political scientists, and so on.

The PEP program provides students with rigorous coursework in politics, economics, and philosophy; an understanding of the moral dimensions of life; and a chance to develop their independence of mind and logical reasoning abilities. They are taught that logic is the basic tool for knowing reality, that cognition is of reality but it is not reality, and that the relationship of consciousness to existence is objective. They are encouraged to be consistent thinkers who are able to interrelate ideas, to recognize assumptions, to follow arguments, to detect fallacies, and to gather and arrange evidence and arguments leading to a logical conclusion.

The intellectual skills acquired by PEP graduates equip them for a wide range of careers including, but not limited to: law, journalism, business, international affairs, teaching, criminal justice, and public and social service. An excellent pre-law major, PEP is also good preparation for graduate study in political science, economics, or philosophy.

Our faculty members recognize that the key to understanding ethics is in the concept of value and thus ultimately is located in epistemology and metaphysics. They endeavor to delineate and explain the inextricable linkages between the various components of a philosophy based on the
nature of man and the world properly understood. An objective philosophy is a systematic and integrated unity with every part depending upon every other part.

Our students are taught that all aspects of the universe are interconnected. Metaphysically, there is one universe in which every entity is related in some way to all the others. No aspect of the total can exist apart from the total. All entities are related through the inexorable laws of cause and effect. No concrete existent is totally isolated without cause and effect. Each entity potentially affects and may be affected by the others. As inhabitants of the universe, each person is linked, via cause and effect, to everything that exists.

It follows that all true knowledge is interrelated and interconnected properly reflecting the single totality that is the universe. Such knowledge must also be a total revealing a unified whole that is the world. The key is to understand that the relationship of a man’s consciousness to existence is objective. Through the use of reason and its methods, objective concepts can be formed and brought together according to objective relationships among the many existents. The gaining of objective knowledge is a metaphysically grounded process because all concretes are different and related to every other concrete and to the total that is the universe. Students need to understand the nature of knowledge and its unity and the requirement for a man to interpret and to synthesize knowledge from various specialties and from various levels of abstraction.

Our faculty members emphasize that integration is the essence of human cognition and is the basic activity and task of a conceptual consciousness. All different levels of knowledge presuppose different levels of integration. Integration involves the discovery of similarities among differences and then uniting them. It follows that a person has to begin with differentiation (i.e., analysis) before proceeding to integration. Integration presupposes a multiplicity and analysis. A man must know the parts before he can combine them. Differentiation offers material to integrate, unify, or bring together in order to explain some aspect of reality. On higher levels of conceptualization (i.e., abstraction from abstractions) differentiation is frequently based on earlier integrations.

Our students learn that fundamental attributes explain other attributes. The understanding of fundamentality is a form of integration. So are the active processes of induction, deduction, principle formation, theory building, abstracting from abstractions, and the construction of a hierarchy of concepts. The essence of the human form of knowledge is the continual quest for, and establishment of, relationships and connections.

PEP students are taught that knowledge has an overall coherence or unity such that the meaning of any one proposition of knowledge cannot be fully grasped without at least an implicit reference to the entire spectrum of knowledge propositions. They come to realize that the integration of knowledge from various domains is not only feasible but also that it is a normal aspect of the pursuit of knowledge. Furthermore, they ultimately conclude that propositions, principles, and concepts from different disciplines can be synthesized to form a new set of propositions, principles, and concepts. Disciplinary knowledge can be considered, combined, and furthered so that the resulting understanding is greater than the sum of the disciplinary parts. In addition, they find that in order to solve particular problems, it is necessary to focus different kinds of knowledge and modes of inquiry upon a specific topic. Our faculty stress that everything is potentially relevant to everything else depending upon the context. Students are encouraged to allow information to be used when it is relevant in a particular appropriate context.

Intellectual integration involves the consideration of all aspects of rationality. Integration is not merely theoretical -- it is also historical, methodological, valuational, praxeological (i.e.,
action-oriented), and so on. PEP students are encouraged: (1) to view men, events, and ideas in causal relationships; (2) to understand and use the scientific method; and (3) to integrate their knowledge with their values and actions. The order and values that make individual human lives effective, significant, and happy must be discovered and created.

**An Example: The Conceptual Foundations of Business Course**

My sophomore-level course in the PEP major, Conceptual Foundations of Business, embraces the major ideas that explain the essence and functions of commerce in a free society. The ideas are the philosophical concepts that have underpinned the idea of capitalism. The course examines the conceptual foundations of business developed over centuries in a number of disciplines, including philosophy, economics, political science, law, history, and so on. This course introduces people to the idea of the free market as a moral institution with a theoretical framework rather than as simply a pragmatic means of efficient production. It is about freedom and the discovery of the type of society men require in order to engage in their own happiness-pursuing activities.

I teach that capitalism is a rational doctrine based on a clear understanding of man and society in which economics, politics, and morality (all parts of one inseparable truth) are found to be in harmony with one another. I explain that the development of a conceptual framework is a natural endeavor that is undertaken in most areas that have claims to be called scientific or based on real world conditions.

Frameworks for thinking about reality have long been the basis for organized knowledge. Constructing a set of ideas about real world objects, events, and occurrences would serve as a framework for a realistic political and economic system. Such a conceptual framework would provide at once both the reasoning underlying society’s rules and institutions and a standard by which they are judged.

I explain that to construct a conceptual framework, we must be concerned with observed or experienced phenomena. Induction, generalization from perceptual experiences of reality, is used to form axioms, concepts, and constructs. The observational order and the conceptual order must correspond with one another if we are to conceive of things properly. It is through the analysis of inductively derived ideas that the appropriate principles of society can be deduced. A correctly constructed internally consistent conceptual framework represents the real world in constructs and language. A conceptual framework should be logically consistent and based on reality so that inferences derived from it can be said to be deductively valid.

The survival and flourishing of capitalism depends upon concepts and moral values that provide the foundations upon which a capitalistic society is constructed. In a world of change, the viability of the market economy is at stake unless those who live and participate within it possess a rational understanding and appreciation of its underlying concepts and values. Present and future participants in the business system need to have access to a “bank” of fundamental ideas that provide the groundwork for the free enterprise system—a conceptual framework, such as the one I develop in my Conceptual Foundations of Business course, provides such a bank.

I explain to my students that having an objective conceptual framework for capitalism based on reality communicates and presents an integrated view of existence formed by a conscious and rational thought process and logical deliberation. Only a free society is compatible with the true nature of man and the world. Capitalism works because it is in accordance with reality. Capitalism is the only moral social system because it protects a man’s mind, his primary means of
survival and flourishing. This free-market perspective serves as a benchmark and foundation for students when they take more advanced-level courses in the PEP program. PEP students take courses in Ancient, Medieval, Modern, and Contemporary Political Thought as well as courses such as: Society, Ethics, and Technology; Business Ethics; Philosophy of Law; Philosophy of Science; Constitutional Law; Comparative Politics; History of Economic Thought; Business and Society; Contemporary Economic Problems; International Economics; and so on.