Written communication, experimental design, data analysis, peer review, presentation of results, experimentation, observations, application of scientific knowledge

Truth is not mutable but our understanding of it is. Currently accepted ideas, explanations. “Shoulders of giants”

Scientific method, observe, the m.w.h., test (to disprove), peer review, theory. Occasionally a law or principle. Tools/technology

Understanding the “observable” universe as systems at different levels

Forms

Knowledge

Methods

Application

Processes
PSYCHOLOGY

Research report; journal articles, books; conferences – poster presentations, multimedia tools; new forms – podcasts; APA formats; policy, commendations, expert testimony; popular magazines and newspapers; teaching and therapy

Quantitative; qualitative; scientific method; applied + basic; observation; experimentation; naturalistic; lab; case study; surveys; correlation; content analysis; inductive and deductive; applied and basic

Understand behaviors and mental processes; why? And how?; “to make things better”; describe, predict, explain, and control; education; mental health; military; parenting; organizational; community; politics; forensic

Theoretical perspectives, behavior, cognitive, psychodynamic, social/personality, cultural context; biological or neurological; developmental; learning theory; prediction -- explanation; awareness of “psychology gone wrong”; multicausal; nature-nurture

Forms

Knowledge

Methods

Application
Processes
Essays, dialogues, meditations, proofs, confession, poems, treatises, plays, aphorism, puzzle, paradoxes, case studies

History of philosophy, schools of philosophy, great thinkers, branches of philosophy, key concepts, vocabulary, protocol, aphorism

Close reading, dialogs, definitions, questions, examples, explanations, thought, experiment, contemplation, similarities and differences, deduction, induction, reduction

Language, importance of soul, open inquiry, truth, wisdom, pursuit of self, universality

Forms

Knowledge

Methods

Application Processes

PHILOSOPHY
COMPOSITION

Scholarly production on: revision; hidden traditions; standard English; writing across disciplines, history and evolution of language

Connection between writing and thinking; how language works – referentially, affectively, socially; identity and power

Protocol analysis; surveys; ethnographies; case studies; narrative

Understanding and applying dimensions of written communications

Application Processes

Methods

Knowledge

Forms
Debunking, arts, performances, books, reviews, essays, new historians, history -> policy, exhibits, primary sources, debate

Fact and contingency, historiography, interpretation/p.o.v., theories/theorists, contemporary wisdom vs. considered opinion

Examination, sources, applying theories, power structures of the discipline; performance ethnography; comparison/contrast; recognition of interpretation; valid knowledge; debate; debunking myths

Knowing where you’ve been > knowing where you’re going; unlocking the meaning of contemporary culture; understanding the options investigated in the past; perspectives of others; understanding the temporality of the present; historiography > changing perspectives; civic obligations demand informed opinions
Dimensions of Disciplinary Understanding (generated at Oct. 2007 National Project Meeting)

COMMUNICATION

Forms

Oral performances; consulting, training, coaching, facilitation; monographs, journal articles, conference papers; archives

Knowledge

Messages are bound by contexts and perspectives; meaning manifests itself through acts; communication is verbal and nonverbal; audience

Methods

Generate and validate theories and models of communication; synthesize and utilize numerous social behavioral theories; quantitative and qualitative research

Application Processes

To build relationships; to actively participate in the democratic process; to understand how meaning is generated through communicative acts; to effectively express oneself
LITERATURE

Forms

Knowledge

Methods

Application Processes

Research papers; papers; theories—claim, evidence, support; reading responses; connections to other texts; students teaching; digital stories; presentations; blogs, memoirs; creative writing

Ability to identify passages in texts; textual architecture; critical vocabulary – literary terms, literary periods, history of language; word meanings; transferability of ideas

Interpretative strategy; criticism of text from a variety of analytical lenses (queer theory, psychoanalysis, historical, etc.); critical thinking; centrality of text; close attention to language; identify passages; research MLA format

Cultural identity; self-knowledge; construction of cultural and national identity; issues of race, class, gender, and sexuality; aesthetic experience; explore ethical approaches to the world; involvement of self in reading
Case studies; monographs, deconstruction of practices; experimentation; analytical interpretations; reconciliation of contradictions; strategic plans; organizational movements; advocacy; orgs and reports; use of primary and secondary data; schools of thought that become social movements at multiple levels

Individual as developing, socially constructed (self as a social being); social structures (status, roles, etc.); social systems (power relations); institutions (political, religious, etc.); class, race, gender; collectivities; misconception: you’re out there by yourself; the sociological imagination (i.e., personal trajectory)

Analytical inquiry that allows us to understand (through analysis of self, social relationships and characteristics) to change the systems (class, gender, race); enhances the emancipatory potential of human agency — making choices

Analytical > tools of sociology (class, race, power, privilege); analytical > causation; humanistic; experience as a site of inquiry; multiple approaches all based on evidence (observable, documentable, replicable)

Knowledge

Methods

Applications

Processes
Mathematical symbols, expressions, inequalities, equations, formulas, theorems, postulates, conjectures, identities, graphs, tables, problem situations, spatial forms, written explanations

Understand and interpret mathematical models, analyze data, reason with statistics, critical thinking. Applications in music, art, science, history, politics, etc. Mathematics is a way of looking at aspects of the world and phenomena to answer or research a question or investigate a situation

Study, interpret and model data; research, investigate, create and solve equations; create and analyze graphical and geometric representations; utilize formulas; prove and apply theorems and conjectures; formulate and solve problems; interpret results

Mathematics is a language used to describe and communicate relationships and patterns; to interpret, analyze and model data to solve real-world problems