

ARIZONA WESTERN COLLEGE
SYLLABUS

PHI 210 PHILOSOPHY OF SCIENCE/GE

Credit Hours: 3 Lec: 3

General Education Course: H (Historical Awareness)

PREREQUISITE: ENG 101 or 107

COURSE DESCRIPTION

A philosophical investigation into the nature of scientific inquiry and methodology: Topics include the history and definition of science, the realist/antirealist debate, the limits of science, the relationship between science and religion, and the nature, formation, use, and confirmation of scientific laws and theories.

1. COURSE GOALS

- 1.1 Use logic and argumentation to analyze dominant issues in philosophy of science.
- 1.2 Examine the assumptions, methods, and principles which underlie the enterprise of scientific investigation.
- 1.3 Relate relevancy of issues in the philosophy of science to scientific debates and controversies in modern society.

2. OUTCOMES

Upon satisfactory completion of this course, students will be able to:

- 2.1 describe the nature of philosophy as a discipline and philosophy of science as a branch of that discipline.
- 2.2 analyze the concept of science in an effort to be able to distinguish science from non-science.
- 2.3 describe the nature and process of modern scientific method and the epistemic status of scientific claims.
- 2.4 explain the differences between science and scientism.
- 2.5 explain the relationship between observation and scientific theories.
- 2.6 formulate and defend a philosophical position on the realist/antirealist debate; the nature of theory confirmation; the relationship between science and religion; or the different models of scientific explanation.

3. AWC GENERAL EDUCATION (GE) OUTCOMES3.1 DITIGAL LITERACY

- Access the needed information effectively and efficiently
- Evaluate information and its sources critically
- Incorporate selected information into one's knowledge base
- Use information effectively to accomplish a specific purpose
- Create content in a digital environment

3.2 COMMUNICA TION

- Write effectively and intelligently for a range of purposes and audiences in the English language (e.g., informing, persuading, advancing an argument, expressing, creating, etc.)
- Read a wide range of texts across the curriculum, demonstrating comprehension through written and oral summary and analysis
- Utilize proper citations, evaluate critically, and use effectively relevant information for problem-solving and presentation of ideas, issues, and arguments

- Demonstrate skill in using electronic media generally appropriate to contemporary academic and professional workplaces
- Produce scholarly or creative works that effectively employ the communication conventions and means of the major field
- Provide writing that presents a clear, specific thesis and awareness of audience
- Fully develops examples to support thesis in logical, coherent manner demonstrates original thinking, depth of analysis, and comprehension of material used and that shows high proficiency in standard English grammar, spelling, and punctuation

3.3 SCIENTIFIC LITERACY

- Distinguish between a scientific hypothesis and scientific theory
- Describe the scientific method as a process
- Analyze an article in popular literature that pertains to science and interpret the findings in terms of public policy, personal experience, or daily life

3.4 CIVIC DISCOURSE

- Describe historical, cultural, and political issues relevant in contemporary local, national, and global communities
- Analyze how such issues affect various local, national, and global regions, communities, and individuals

4. METHODS OF INSTRUCTION

4.1 Class discussions

4.2 Lectures

4.3 Instructional technology

4.4 Text analysis

5. LEARNING ACTIVITIES

5.1 Note taking

5.2 Classroom discussion

5.3 Group activities

5.4 Written summaries on assigned reading

5.5 Classroom presentations

6. EVALUATION

6.1 Quizzes and exams

6.2 Essay assignments

6.3 Oral presentations

6.4 Participation

7. STUDENT RESPONSIBILITIES

7.1 Under AWC Policy, students are expected to attend every session of class in which they are enrolled.

7.2 If a student is unable to attend the course or must drop the course for any reason, it will be the responsibility of the student to withdraw from the course. Students who are not attending as of the 45th day of the course may be withdrawn by the instructor. If the student does not withdraw from the course and fails to complete the requirements of the course, the student will receive a failing grade.

7.3 Americans with Disabilities Act Accommodations: Arizona Western College provides academic accommodations to students with disabilities through AccessABILITY Resource Services (ARS). ARS provides reasonable and appropriate accommodations to students who

have documented disabilities. It is the responsibility of the student to make the ARS Coordinator aware of the need for accommodations in the classroom prior to the beginning of the semester. Students should follow up with their instructors once the semester begins. To make an appointment call the ARS front desk at (928) 344-7674 or ARS Coordinator at (928) 344-7629, in the College Community Center (3C) building, next to Advising.

- 7.4 Academic Integrity: Any student participating in acts of academic dishonesty—including, but not limited to, copying the work of other students, using unauthorized “crib notes”, plagiarism, stealing tests, or forging an instructor’s signature—will be subject to the procedures and consequences outlined in AWC’s Student Code of Conduct.
- 7.5 Texts and Notebooks: Students are required to obtain the class materials for the course.
- 7.6 Arizona Western College students are expected to attend every class session in which they are enrolled. To comply with Federal Financial Aid regulations (34 CFR 668.21), Arizona Western College (AWC) has established an Attendance Verification process for "No Show" reporting during the first 10 days of each semester. Students who have enrolled but have never attended class may be issued a “No Show” (NS) grade by the professor or instructor and receive a final grade of “NS” on their official academic record. An NS grade may result in a student losing their federal financial aid. For online classes, *student attendance in an online class is defined as the following* (FSA Handbook, 2012, 5-90):
- Submitting an academic assignment
 - Taking an exam, an interactive tutorial or computer-assisted instruction
 - Attending a study group that is assigned by the school
 - Participating in an online discussion about academic matters
 - Initiating contact with a faculty member to ask a question about the academic subject studied in the course