



**COURSE OUTLINE : HUMAN 110**

**D Credit – Degree Applicable**

**COURSE ID 002059**

**Cyclical Review: November 2018**

**Revision: November 2021**

**COURSE DISCIPLINE :** HUMAN  
**COURSE NUMBER :** 110  
**COURSE TITLE (FULL) :** Science, Literature, And Human Insight  
**COURSE TITLE (SHORT) :** Science, Literature, Insight  
**ACADEMIC SENATE DISCIPLINE:** Humanities

### **CATALOG DESCRIPTION**

HUMAN 110 is an interdisciplinary, intercultural course in which students further apply the principles of critical thinking and comparative critical analysis in order to better understand the relationships among literature, science, and technology. Through directed reading, class discussion, and writing, students develop logical thought processes enabling them to reason, inductively and deductively, to distinguish fact from judgment, to examine evidence and credibility of sources, to propose new ideas, and to reach logical conclusions. Through their study of literature, students learn about human values, behavior and motivations; through their study of scientific and technological achievements, they learn about the methods and limitations of science. Major historical and contemporary themes linking science and literature are presented for evaluation. This course may be team taught.

Total Lecture Units:3.00

Total Laboratory Units: 0.00

**Total Course Units: 3.00**

Total Lecture Hours:54.00

Total Laboratory Hours: 0.00

Total Laboratory Hours To Be Arranged: 0.00

**Total Contact Hours: 54.00**

**Total Out-of-Class Hours: 108.00**

Recommended Preparation: ENGL 100 or ESL 151.



**ENTRY STANDARDS**

	<b>Subject</b>	<b>Number</b>	<b>Title</b>	<b>Description</b>	<b>Include</b>
1	ENGL	100	Writing Workshop	Read, analyze, and evaluate contemporary articles and stories to identify topic, thesis, support, transitions, conclusion, audience, and tone;	Yes
2	ENGL	100	Writing Workshop	read, analyze, and evaluate contemporary articles and stories for the comprehension of difficult content and the identification of main ideas and (topic-based) evidence;	Yes
3	ENGL	100	Writing Workshop	read, analyze, and evaluate student compositions for unity, development, use of evidence, interpretation, coherence, and variety of sentence form;	Yes
4	ENGL	100	Writing Workshop	write a summary of a contemporary article or story with correct citation techniques;	Yes
5	ENGL	100	Writing Workshop	write an argumentative essay that has an introduction, body paragraphs, and a conclusion, demonstrating a basic understanding of essay organization;	Yes
6	ENGL	100	Writing Workshop	write an argumentative essay that addresses the topic, is directed by a thesis statement, uses appropriate textual evidence, develops logical interpretations, and concludes with some compelling observations;	Yes
7	ENGL	100	Writing Workshop	write an argumentative essay that integrates the ideas of others (i.e., authors) through paraphrasing, summarizing, and quoting with correct citation techniques;	Yes
8	ENGL	100	Writing Workshop	write an argumentative essay that generates novel ideas (those that add to the conversation rather than repeating the author's ideas) related to the topic and the readings;	Yes
9	ENGL	100	Writing Workshop	write compositions (e.g., summaries and argumentative essays) that are easy to read and follow, though some errors in grammar, mechanics, spelling, or diction may exist;	Yes
10	ENGL	100	Writing Workshop	proofread and edit essays for content, language, citation, and formatting problems.	Yes
11	ESL	151	Reading and Composition V	employ basic library research techniques;	Yes
12	ESL	151	Reading and Composition V	compose one research paper (1,000 words) or two short research papers (500-700 words each) with citations.	Yes



**EXIT STANDARDS**

- 1 Read critically and write critical, thesis-based essays from rhetorical perspectives;
- 2 compare and contrast relationships between science and literature;
- 3 analyze, synthesize, distinguish fact from opinion or belief, seek credible sources, propose original ideas, and reach logical conclusions;
- 4 examine many of the bases for important human values, identify bias and prejudice, and respect the views of others;
- 5 evaluate objectively the ethics of specific scientific issues, and distinguish between science and pseudo science;
- 6 develop the skills of literature and language analysis through use of original sources;
- 7 develop progressively more sophisticated written communication skills emphasizing meaning and substance.

**STUDENT LEARNING OUTCOMES**

- 1 Identify, analyze, evaluate, and synthesize a variety of sources connected to literature and the ethics of scientific issues
- 2 compose thesis-based essays and/or other projects which analyze and synthesize information from multiple sources relating literature to human values and the study of scientific and technological ideas.

**COURSE CONTENT WITH INSTRUCTIONAL HOURS**

	Description	Lecture	Lab	Total Hours
1	Ancient Explanations of Being: Creation, Evolution, and Immortality <ul style="list-style-type: none"> <li>• Sumerian, Babylonian, Greek, and other myths-roles of gods and humans; guest theme</li> <li>• Biblical accounts-relationships to mythic and scientific accounts</li> <li>• Scientific explanations—Theories; extrapolation of evidence; comparative analysis of completeness of mythic and scientific explanations</li> <li>• Critical thinking definitions and applications—knowledge and intellectual skills; commitment, attitude, and behavior; the critical spirit; analysis of language (tone and style) used to make claims</li> </ul>	12	0	12



2	<p>Precursors of Science and Constituents of Courtly Love: The Occult</p> <ul style="list-style-type: none"> <li>• Magic, sorcery, and the romantic love story (spells and potions)—legends; codes, customs, and culture; medieval justice and emergence of due process</li> <li>• Herbs, poisons, and drugs—symbolism vs. chemical composition; “new” and “old” science; coexistence of natural, preternatural, and supernatural</li> <li>• alchemy and chemistry—probable and improbable;</li> <li>• Symbolic process using philosophical, religious, and “old” scientific ideas; physical elements of “new” science</li> <li>• Astrology and astronomy—mythology, religion, symbol, prediction, physical observation and measurement</li> <li>• Logical development of scientific hypothesis, theory, and law</li> </ul>	8	0	8
3	<p>Emergence of Modern Medicine: The Healing Arts and Human Perspectives</p> <ul style="list-style-type: none"> <li>• Ancient and modern medicine men—Hippocrates to Bailey; ancient Greek, Arabic, and Medieval European discoveries to contemporary medical breakthroughs</li> <li>• Diseases; famous and infamous—black plague, small-pox, cancer, AIDS</li> <li>• Psychic healing—psychological or measurable effects; appearance and reality; opinion and fact; self-limiting disease</li> <li>• Surgery, antisepsis, and anesthesiology—wound surgery; conquest of pain, understanding of anatomy; problem of infection; compensatory techniques (speed of surgery)</li> <li>• Ethics of medicine—(rights of individual; protection of society); positive and negative effects of experimentation; choice and responsibility; duty to humankind; ethical dilemmas</li> <li>• Logic in decision making and medical diagnoses—probability, statistics; extrapolation from known facts</li> </ul>	12	0	12



4	<p>The Mind and Its Machinations: The Conscious</p> <ul style="list-style-type: none"> <li>• Hallucinations, visions, dreams, and insanity—causes and effects; limitations of mechanistic theory</li> <li>• Paranormal claims—psychic phenomena; superstition, chance, coincidence, prejudice, bias</li> <li>• Inductive and deductive reasoning—logical fallacies in language and thought; symbol and meaning</li> <li>• False claims and hoaxes—suspension of disbelief; motivations for belief</li> </ul>	10	0	10
5	<p>Technology as Hero or Villain: The Explosion of Traditional Ethics</p> <ul style="list-style-type: none"> <li>• Propaganda—the message, the motive, the techniques and devices; logical fallacies revisited; plausible inferences and reasoned conclusions</li> <li>• Weaponry and warfare—development of sophisticated weapons; espionage; intelligence modes, national security; nuclear warfare</li> <li>• Armament and disarmament—cost; efficacy, feasibility; international arms limitation agreements</li> <li>• Logic in problem solving—analyzing alternatives, assessing impacts of technological advances; understanding the broader view; thinking dialogically and dialectically</li> <li>• Survival—roles of individuals and governments; choices and responsibilities; technology as master or slave; reciprocity and intercultural empathy</li> </ul>	12	0	12
				<b>54</b>

**OUT OF CLASS ASSIGNMENTS**

- 1 essays of analysis, evaluation and argumentation;
- 2 additional writing assignments (including journal entries, reading responses and field notes);
- 3 preparation for presentations and group projects;
- 4 research activities (e.g. research focused on helping laypeople to understand scientific concepts).

**METHODS OF EVALUATION**

- 1 peer review activities;
- 2 oral presentations or debates.
- 3 essay examinations or other writing assignments (both in and outside of class);



**METHODS OF INSTRUCTION**

- Lecture
- Laboratory
- Studio
- Discussion
- Multimedia
- Tutorial
- Independent Study
- Collaboratory Learning
- Demonstration
- Field Activities (Trips)
- Guest Speakers
- Presentations

**TEXTBOOKS**

Title	Type	Publisher	Edition	Medium	Author	IBSN	Date
The Digital Mind: How Science Is Redefining Humanity	Required	The MIT Press	1	Print	Arlindo Oliveira	978-0262036030	2017
The Cambridge Companion to Literature and Science	Required	Cambridge University Press	1	Print	Steven Meyer	978-1107079724	2018
The Geography of Insight: The Sciences, the Humanities, How they Differ, Why They Matter	Required	Oxford University Press	1	Print	Richard Foley	978-0190865122	2018

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