Arizona State University Criteria Checklist for

SOCIAL-BEHAVIORAL SCIENCES [SB]

Rationale and Objectives

Social-behavioral sciences use distinctive scientific methods of inquiry and generate empirical knowledge about human behavior, within society and across cultural groups. Courses in this area address the challenge of understanding the diverse natures of individuals and cultural groups who live together in a complex and evolving world.

In both private and public sectors, people rely on social scientific findings to consider and assess the social consequences of both large-scale and group economic, technological, scientific, political, ecological and cultural change. Social scientists' observations about human interactions with the broader society and their unique perspectives on human events make an important contribution to civic dialogue.

Courses proposed for a General Studies designation in the Social-Behavioral Sciences area must demonstrate emphases on: (1) social scientific theories, perspectives and principles, (2) the use of social-behavioral methods to acquire knowledge about cultural or social events and processes, and (3) the impact of social scientific understanding on the world.

Revised April 2014

Proposer: Please complete the following section and attach appropriate documentation.

ASU[SB] CRITERIA						
A SOCIAL-BEHAVIORAL SCIENCES [SB] course should meet all of the following criteria. If not, a rationale for exclusion should be provided.						
YES	NO	Citeria. Il noi, a radonale for exclusion should be pr	Identify Documentation Submitted			
		1. Course is designed to advance basic understanding and knowledge about human interaction.	See Syllabus			
		Course content emphasizes the study of social behavior such as that found in: ANTHROPOLOGY ECONOMICS CULTURAL GEOGRAPHY HISTORY	See Syllabus & Book Table of Contents			
		3. Course emphasizes: a. the distinct knowledge base of the social and behavioral sciences (e.g., sociological anthropological). OR b. the distinct methods of inquiry of the social and behavioral sciences (e.g., ethnography, historical analysis).	See Syllabus & Book Table of Contents			
		4. Course illustrates use of social and behavioral science perspectives and data.	See Syllabus & Book Table of Contents			
		THE FOLLOWING TYPES OF COURSES ARE EXCLUDED FROM THE [SB] AREA EVEN THOUGH THEY MIGHT GIVE SOME CONSIDERATION TO SOCIAL AND BEHAVIORAL SCIENCE CONCERNS:				
		Courses with primarily arts, humanities, literary or philosophical content.				
		 Courses with primarily natural or physical science content. Courses with predominantly applied orientation for professional skills or training purposes. 				
		Courses emphasizing primarily oral, quantitative, or written skills.				

Course Prefix	Number	Title	General Studies Designation
HST	319	History of Aviation	SB

Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
Criterion 1	This course advances student	C-1 Yellow in syllabus on SLOs, assignments,
	understanding and knowledge of	course readings, and module schedule.
	human interaction through study of	
	the social institutions of technology	
	and the social and cultural elements	
	of technological change.	
Criterion 2	This course emphasizes the study	C-2 Red in syllabus on SLOs, assignments,
	of social behavoir through historical	course readings, and module schedule.
	analysis.	
Criterion 3b	This course emphasizes the distinct	C-3 Blue in syllabus on SLOs, assignments,
	methods of inquiry of social and	course readings, and module schedule.
	behavioral science through its	
	emphasis on historical analysis	
	employing the use of	
	interdisciplinary tools to understand	
	past human relationships in	
	societies and their relationships with	
	technology.	
Criterion 4	This course illustrates the use of	C-4 Green in syllabus on SLOs, assignments,
	social and behavioral science	course readings, and module schedule.
	perspectives and data through its	
	readings, discussion, writing	
	assignments, and approach to	
	studying the past.	

Social And Behavioral Sciences [SB] Page 4

HST 319: History of Aviation

Instructor: Dr. Valerie Adams Office Hours:

Email: valerie.adams@asu.edu Office Room: SANCA 251 - Polytech

Course Time: Online Course Room: Online

Course Description:

Fast-paced introduction to the intertwined histories of engineering, economics, societal changes, war, globalization, and technological innovation, as they shape the consequence of aviation on the globe from the 18th century to the present.

Course Overview:

CRITERIA 1: This class equips students with a framework for understanding the history of aviation that will benefit them in many interdisciplinary endeavors from technological change to historical inquiry. Students will experience many of the highlights and key moments in this history of aviation to illustrate the transformative role of aviation in human civilizations. This course considers how human societies have regarded flight throughout history, using significant moments analyzed within the broader context of culture, economics, politics, society, technology, and war.

Student Learning Outcomes:

By the end of the course, students will be able to:

- Describe the global History of Aviation from the 18th century to the present
- CRITERIA 1 & 2: Study past global cultures and how humans' interactions with aeronautical science have impacted modern global cultures
- CRITERIA 3 & 4: Analyze research which focuses on the effects of aviation, from lighterthan-air to aerospace, on human interactions affecting societies [This course SLO connects to the SB guideline's emphasis on studying human interaction. Students will be presented with theories and ideas related to social scientific inquiry into aeronautics. For example, students will be exposed to theories related to the Social Constructions of technology.]
- Understand how human ideas about war, society, culture and economics have formed and changed over time
- Recognize how different aeronautical cultures are developed across the world
- Research and communicate, though various forms (written, presentation, and group discussion/work) **CRITERIA 2:** key social elements of the complex process by which ideas are transmitted to society [Any technology must be understood through its relationship with human societies, institutions, and through interactions between individuals. This course will advance students' knowledge on a wide range of human interactions.]
- Demonstrate research skills needed to identify key issues and select appropriate sources for use in course assignments
- CRITERIA 4: Present individual student research through written work, discussion, and collaborative projects. [Students will work collectively to compile a collection of moments and approaches to studying the history of aeronautics including social scientific approaches to studying the past. This will be applied most thoroughly within the website project.]

*** This is a dynamic syllabus and subject to change ***

Commented [va1]: Criteria 1 & 2

Commented [va2]: This course SLO connects to the SB guideline's emphasis on studying human interaction. Students will be presented with theories and ideas related to social scientific inquiry into aeronautics. For example, students will be exposed to theories related to the Social Constructions of technology.

Criterion 3b & 4

Commented [va3]: Any technology must be understood through its relationship with human societies, institutions, and through interactions between individuals. This course will advance students' knowledge on a wide range of human interactions.

Criterion 2

Commented [va4]: Students will work collectively to compile a collection of moments and approaches to studying the history of aeronautics including social scientific approaches to studying the past. This will be applied most thoroughly within the website project.

Criterion 4

^{*} Enrolling in this class means that you have read, understood, and accepted the policies described in this document. In the event of a disagreement in interpreting a course policy, the instructor's interpretation is paramount and binding. You have the right to withdraw if you do not accept these policies.

Course Assessment and Grading:

Assignment Weighting:

Weekly Discussion & Module Completion 30% Review and Report Article Discussion Assignments 35% Moments and Movements Website Project 35%

Grading Scale:

A+	97%+
A	<97-94%
A-	<94-90%
B+	< 90-87%
В	<87-84%
B-	<84-80%
C+	<80-77
C	<77-70%
D	<70-60%
E	<60-0%

Weekly Discussion & Module Completion:

This course is an online course with most of the regular activity taking place on Canvas. Students must complete each weekly module and all assigned components of the module each week. Every week will have assigned readings in course texts and/or articles. CRITERIA 1 & 2: Every week will also feature a discussion posting. [Discussion postings offer a wide range of responses. Many discussions focus on how different institutions of knowledge shape human approaches to organizing knowledge. These institutions are fundamentally shaped by the human relationship and expectations.] Students must first post a persona reaction or reflection on each week's content (including readings and recorded lecture segments). Each student then must propose at least one question to the weekly discussion board. Finally, students must respond to at least two other questions and any follow questions from the instructor. [More information in Canvas on discussions]. Some weeks may have other types of assignments such as quizzes, which must be completed by the date specified in Canvas.

Review and Report Article Discussion Assignments:

To supplement the wide-ranging survey nature of the course, students will be challenged to select three articles to read in detail. These articles will be selected in consultation with the instructor and should be found in an ASU library database (JSTOR, Project Muse, etc.). Criteria 3 & 4: Students will first gain approval for a history of science or technology article or from a relevant discipline such as sociology, anthropology, economics, or political science. Students will individually highlight a wide range of scholarship related to studying technology, culture, war, economics, and society as related to aviation. These article readings will collectively aid the increased reach of the course by bringing in perspectives outside the general assigned readings. This aspect of the course will widely survey many aspects of social and behavioral science perspective.] Then the student will read the article. The student will then write an extended post (roughly 750 words) that both reviews the articles merits as well as reports the key takeaway message. Students will receive feedback from the instructor as well as the other students in the class. These readings and discussions may contribute to the class website project.

Criteria 4: NOTE for the committee: This list is not in the syllabus but included here for the committee to see a sampling of articles, the types of articles, students are expected to use for

Commented [va5]: Discussion postings offer a wide range of responses. Many discussions focus on how different institutions of knowledge shape human approaches to organizing knowledge. These institutions are fundamentally shaped by the human relationship and expectations. Criteria 1 & 2

Commented [va6]: Students will individually highlight a wide range of scholarship related to studying technology, culture, war, economics, and society as related to aviation. These article readings will collectively aid the increased reach of the course by bringing in perspectives outside the general assigned readings. This aspect of the course will widely survey many aspects of social and behavioral science perspective. Criteria 3b & 4

this assignment. Highlighted in bold print are the journals and illustrate the range of social and behavioral science approaches to the study of aviation history

Michael Deal, Lisa Daly & Cathy Mathias, "Actor-Network Theory and the Practice of Aviation Archaeology," *Journal of Conflict Archaeology* (January 2015)

Yoav Di-Capua, "Common Skies Divided Horizons: Aviation, Class and Modernity in Early Twentieth Century Egypt," *Journal of Social History* (Summer 2008)

Peter Simons, "Aviation's Heartland: The Flying Farmers and Postwar Flight," *Agricultural History*, (2015)

Michael Vandenbergh & Daniel Metzger, "Private Governance Responses to Climate Change: The Case of Global Civil Aviation," *Fordham Environmental Law Review* (2018)
Baldey Raj Nayar, "Regimes, Power, and International Aviation," *International Organization*,

Stephen Bocking, "A Disciplined Geography: Aviation, Science, and the Cold War in Northern Canada, 1945-1960," *Technology and Culture*, (April 2009)

Wagar Zaidi, "Aviation Will Either Destroy or Save Our Civilization: Proposals for the International Control of Aviation, 1920-1945," *Journal of Contemporary History*, (January 2011)

Moments and Movements Website Project:

Criteria 2 & 3 & 4 Students will each contribute to a class website synthesizing the key moments and movements in the History of Aviation. [Students are encouraged to go beyond simply restating what they learned about the history of aviation in their contributions. They need to present their own interpretation of the moment or movement. To do so, students will use historical analysis and the appropriate tools, theory, and approaches they experienced in the course to frame this contribution.] Each contribution must reflect each student's takeaway lesson(s) learned throughout the course, and these lessons should reflect wider themes of the course. The website as a whole should call on sources used throughout the course in supporting their ideas as well as presenting and synthesizing knowledge gained through interactions in class discussions. The website, once completed by the class, should reflect the understanding of what interdisciplinary tools and methods scholars have developed to study of aviation history and aeronautical science. Additional guidelines and details to be provided on a separate handout with organizational roles to be assigned by the instructor.

Required Textbooks:

The following books must be acquired by the students to successfully complete the course. Additional readings may be posted on Canvas within the weekly modules. See Canvas for weekly reading assignment details.

CRITERIA 1 & 2 Malcolm Gladwell, The Bomber Mafia: A Dream, a Temptation, and the Longest Night of the Second World War, ISBN: 978-0316296618 [His book is not a war story, but rather boils down to people at moments of crisis. It is fundamentally about human institutions of knowledge and how those human relationships around those institutions influenced the creation and propagation of area bombing. Ethics, morals, and the question "was it worth it?" are all examined.]

CRITERIA 1 & 2 Alexei Leonov & David Scott, Two Sides of the Moon: Our Story of the Cold War Space Race ISBN: 978-0312308667 This is a dual autobiography of a Soviet cosmonaut and an American astronaut. Students continue to examine about human institutions of knowledge and how

Commented [va7]: This list is not listed in the student syllabus, nor is it comprehensive, but here for easy reference for the committee. Highlighted in bold print are the journals and illustrate the range of social and behavioral science approaches to the study of aviation history.

Criterion 4

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Criteria 2, 3b, & 4

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Commented [va10]: This is a dual autobiography of a Soviet cosmonaut and an American astronaut. Students continue to examine about human institutions of knowledge and how those human relationships around those institutions influenced the creation and propagation of the Cold War and stresses the similarities of each country to harness technology for political gain. Students also learn how individual stories transcended the confines of the politics of the day. Criteria 1 & 2

those human relationships around those institutions influenced the creation and propagation of the Cold War and stresses the similarities of each country to harness technology for political gain. Students also learn how individual stories transcended the confines of the politics of the day.]

Dominick Pisano, Editor, *The Airplane in American Culture* ISBN: 978-0472068333 [I've addressed each essay from this collection in the module schedule section.]

Module Schedule: [The module comments below highlight some key interactions between this course's emphasis on historical inquiry and the connects to social science scholarship.

Note: The examples highlighted are not exhaustive, but readily shareable examples of how this course promotes historical analysis related to the SB criteria.]

This course meets online via Canvas. Weekly modules (as outlined below) will be posted with all reading assignments, lecture segments, and other activities. Please view these modules on Canvas weekly to interact and complete assignments and discussions.

Module 1: Welcome & Course Themes

Welcome to the course modules askes students to share what topics they find most interesting in the history of aviation. It also asks students to consider the complex assumptions modern people have about the significance that aeronautics had had on progress. Students will, furthermore, consider how aviation affects and is affected by social forces like the economy, international relations, and government policy.

Read: CRITERIA 3 & 4: "New Directions in the History of Aviation" in *The Airplane in American Culture* and "The Airplane and the American Experience" in *The Airplane in American Culture*. [Aerospace history represents a branch of the history of technology and embraces the Social Construction of Technology (SCOT) as posited by Wiebe Bijker, Thomas Hughes, and Trevor Pinch in The Social Construction of Technological Systems. Another direction for aerospace history has been cultural history that has encompassed a wide range of "culture concepts." Another approach has been epitomized in Jenifer Van Vleck's Aviation and the American Ascendancy in which she sees technology as central to the history of international relations.]

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Module 2: Visions of Flight: Public Perception

This module looks at the centuries long human's relationship with flight. Students will consider the interaction between new technology and societies.

Read: CRITERIA 2: "The Greatest Show Not on Earth: The Confrontation between Utility and Entertainment in Aviation" in *The Airplane in American Culture*. [Historian, and Curator of the aeronautics Division of the National Air and Space Smithsonian museum, this essay examine flight in America as a reflection of underlying social behavior, cultural ideas, ideals, and ideologies, focusing on the conflict between aviation's utility and its entertainment value, aviation and American ideals, and the airplane as a symbol of national power.]

Module 3: Aircraft Go to War: Murder in the Skies?

This module considers the first of many complex case studies analyzing the relationship man has with technology, especially technologies harnessed for war. It first considers the considerable technological innovation in aeronautics that allowed the creation of these weapons. It challenges students to consider questions of ethics, survival, and international politics.

Read: Adam Jungdahl, "Public Influence on the Proliferation of Military Aviation, 1907-1912," *Air Power History* (Spring 2013)

Module 4: The Airplane and Race: A Dual Consequence of Technology

The module studies the interaction between technology and race.

Read: CRITERIA 1, 2, 3, 4: "Great Shadow in the Sky:" The Airplane in the Tulsa Race Riot of 1921 and the Development of African American Visions of Aviation, 1921-1926" in The Airplane in American Culture [Author Jill D. Snider conquers African American history and technology in much of her scholarship. She takes a macro-micro approach and has to rely on non-traditional primary sources to tell her story, as many African Americans did not leave behind the more familiar personal writings or business records. As she explained, she had to find new resources. Not only does this essay challenge students to consider how new technologies (the airplane) were harnessed by the white community to hurt the black community and also how the black community embraced the technology to "prove" their status in society, the essay has the students engaging in research that involves social science inquiry across cultural geography, sociology, and history,] and "Blue Skies into White Space: Southern African Response to the Trans-African Flight of the Silver Queen, 1920," Technology and Culture, (2018). [Historian Tilman Dedering explores the cultural and political connotations of aviation in a colonial and imperial setting. He demonstrates that technology (the airplane) was a tool to consolidate white supremacy over Africans and sees cultural differences and political conflicts as influenced by the public discourse about technological

Module 5: The Golden Age of Flight: Hero Worship

This module investigates the cult of personality and has students consider social and cultural constructs.

Read: "The Man Nobody Knows: Charles A. Lindbergh and the Culture of Celebrity" in *The Airplane in American Culture* and "The Airplane and American Literature" in *The Airplane in American Culture*.

Commented [va14]: Historian, and Curator of the aeronautics Division of the National Air and Space Smithsonian museum, this essay examine flight in America as a reflection of underlying social behavior, cultural ideas, ideals, and ideologies, focusing on the conflict between aviation's utility and its entertainment value, aviation and American ideals, and the airplane as a symbol of national power.

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Criterion 1 & 2

Module 6: The Airplane as a Symbol of National Identity: Empire Building

This module studies the psychological role the airplane played for Western Powers to subjugate people over the globe in pursuit of colonies.

Read: Robert Hemmings, "Modernity's Object: The Airplane, Masculinity, and Empire," Criticism (Spring 2015) and Federico Caprotti, "Visuality, Hybridity, and Colonialism: Imagining Ethiopia through Colonial Aviation, 1935-1940," Annals of the Association of American Geographers, (March 2011)

Module 7: Interwar Challenges: Institutional Culture

This module investigates the development of individualistic and theoretical methods of pursuing technological knowledge will be considered.

Read: CRITERIA 3: "Transforming Technology in the Army Air Corps, 1920-1940: Technology, Politics, and Culture for Strategic Bombing" in *The Airplane in American Culture* [Historian of Science and Technology, Timothy Moy's essay examines the interaction between technology and institutional culture, intertwining the dependent relationship between government, the military, private enterprise, and academia. He shows that institutional culture plays a large, though seldom acknowledged, role in technological innovation and utilizes the tools of social sciences, including a great deal of statistical analysis.] and *The Bomber Mafia* Part One: The Dream.

Module 8: Battle for the Skies: Moral Dilemmas

This module

Read: "Experiment in the Cockpit: The Women Airforce Service Pilots of World War II" in *The Airplane in American Culture* and *The Bomber Mafia* Part Two: The Temptation.

Module 9: The Airplane and Gender: The Flight Attendant

Aviators have largely been men, but students have, throughout the course, seen examples of female empowerment in the cockpit. This unit looks at gender and LBGQ studies through the lens of the flight attendant.

Read: CRITERIA 4: "Who Says It's a Man's World?": Women's Work and travel in the First Decades of Flight in The Airplane in American Culture and excerpt from The Jet Sex: Airline Stewardesses and the Making of an American Icon (2013) and excerpt from Plane Queer. Labor, Sexuality, and AIDS in the history of male flight attendants (2013). [All three scholars here are part of the New Aerospace History that characterizes a transformation of the field in the last few decades. These histories intrinsically relate the subject to larger issues of society, politics, and culture, taking a more sophisticated view of the science, technology, and individual projects than historians previously held.]

Module 10: Open Skies: Who Owns Airspace

This module first considers the technologies of the space race between the United States and the Soviet Union, as chronicled in *Two Sides of the Moon*. It also discusses a topic that arose in

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Criteria 3

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Commented [va20]: All three scholars here are part of the New Aerospace History that characterizes a transformation of the field in the last few decades. These histories intrinsically relate the subject to larger issues of society, politics, and culture, taking a more sophisticated view of the science, technology, and individual projects than historians previously held.

Criterion 1 & 4

the early years of flight – who can fly over a country. This module allows students to think about national sovereignty and international law, reaching back to international treaties regarding airspace, issues that arose during the Cold War regarding access to Soviet airspace, and the reading allows students to engage in material not often considered, that of American Indians' sovereignty.

Read: Two Sides of the Moon and William Haney, "Protecting Tribal Skies: Why Indian Tribes Possess the Sovereign Authority to Regulate Tribal Airspace," American Indian Law Review, (2015-2016)

Module 11: The Airplane and the Culture of War

This module

Read: CRITERIA 2: "Peace is Our Profession: The Bombers Take Over" in *The Airplane in American Culture* [Cultural Historian H. Bruce Franklin is a prolific author who is one of America's leading cultural historian and practitioner of American Studies, utilizing cross-disciplinary social and behavioral sciences. This essay has students critically analyze how humans glorified the technological superiority of the post-WWII strategic bomber as discerned in the cultural consumption of a naïve society.] and "Stick and Rudder University: Training and the Creation of the Flight Suit Officer" in *The Airplane in American Culture*. [John Darrell Sherwood provides a social history that focuses on individual military experience and the institutional cultures of fighter pilots.]

Module 12: Globalization: The World is Small and the World is One

This module focuses on the effect of aviation in globalization and interdependency of global economies and cultures. Wendell Willkie quipped in the 1940s that, "The modern airplane creates a new geographical dimension...There are no distant places any longer: the world is small and the world is one."

Read:

Module 13: Presentations of Group Projects

This unit is when students present their group projects.

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