

HIST 389-003-History of Aviation

3 credit hours

Spring 2015; Wednesdays, 7:20 pm-10:00 pm

Innovation Hall 208

Dr. Jeremy R. Kinney (jkinney3@gmu.edu)

Office: Robinson B 334

Hours: Wednesdays, 6:00 pm-7:00 pm or by appointment

This course is an introduction to the history of aviation from its origins to the present day. It examines selected topics on flight within the Earth's atmosphere from an international perspective with particular emphasis on events in the United States. Overall, the course stresses the history of flight within the broader context of culture, economics, politics, society, technology, and war through lecture, readings, film, writing assignments, and discussions.

The course surveys the seven major periods in the history of aviation: the origins of flight, 1783-1903; early flight, 1903-1914; World War I, 1914-1918; the Aeronautical Revolution, 1918-1938; World War II, 1939-1945; the Aerospace Industry, the Cold War, and Postwar Growth, 1947-1990; and late twentieth century developments, 1990-2003. Major themes and issues within those eras include: the emergence of aeronautical engineering as a professional discipline; airships, balloons, and blimps; aviation in the Third World; commercial airlines; culture and society with an emphasis on aviation art, literature, music, and film; the evolution of aeronautical technology; government support of aviation; the growth of the aviation industry; the idea of progress in the development of the airplane; manufacturing and design; military air power doctrine, theory, and practice; the minority experience in aviation; naval aviation; rotary-wing flight; flight as spectacle; and sport and recreational aviation.

Required Books:

Bednarek, Janet R. Daly. *Dreams of Flight: General Aviation in the United States*. College Station: Texas A&M University Press, 2003.

Heppenheimer, T.A. *Turbulent Skies: The History of Commercial Aviation*. New York: J. Wiley & Sons, 1995.

Higham, Robin. *100 Years of Airpower and Aviation*. College Station: Texas A&M University Press, 2003.

Lindbergh, Charles A. *The Spirit of St. Louis*. New York: Scribner, 1953.

Recommended Book:

Kinney, Jeremy R. *Airplanes: The Life Story of a Technology*. Baltimore: Johns Hopkins University Press, 2008.

Course Requirements:

1. **SHORT EXAMS:** Students will take two short exams, which will consist of multiple choice, brief identification, and concise essay questions.
2. **PARTICIPATION:** Students will be graded individually for their participation in general class discussions and for their contribution to the weekly popular culture discussions.

3. RESEARCH PAPER: Students will complete a statement of research topic, including a bibliography of at least 8 secondary works, and author one 8 page research paper that focuses on a significant aspect of the history of aviation.
4. BOOK/FILM SUMMARY/DISCUSSION: Students will read Charles A. Lindbergh's *The Spirit of St. Louis*, compare and contrast it to the Hollywood adaptation, submit a 1-2 page summary, and discuss the work in class.
5. EXTRA CREDIT: Students will write a 1 page review of an aviation-themed movie for a maximum of three points to be added to the final grade at the end of the semester.

Grade Determination:

Short Exam #1	15%
Short Exam #2	15%
Participation	15%
Research Statement	5%
Research Paper	35%
Book/Film Discussion/Summary	15%
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Total	100%
Extra Credit	up to 3 points!

Course Policies

Please read these policies and make sure you understand them. If you have questions, please ask. You are expected to know these policies and to plan your work schedule, transportation, etc. accordingly.

Academic Integrity

The University is an academic community. Its fundamental purpose is the pursuit of knowledge. Like all other communities, the University can function properly only if its members adhere to clearly established goals and values. Essential to the fundamental purpose of the University is the commitment to the principles of truth and academic honesty. Mason students are bound by an Honor Code (<http://academicintegrity.gmu.edu/honorcode/>), which states, "Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work." The principle of academic integrity is taken very seriously, and violations are treated gravely. In this course, academic integrity means that:

1. When you are responsible for a task, you will perform that task.
2. When you rely on someone else's work in any aspect of the performance of that task, you will give full credit in the proper, accepted form.
3. All aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions.
4. You will tell the truth about the status of your work.

For a discussion of what constitutes plagiarism, go here:

<http://classweb.gmu.edu/WAC/EnglishGuide/Critical/plagiarism.html>

When in doubt, please ask for guidance and clarification. Academic dishonesty will not be tolerated. I will report students suspected of dishonesty to the University's Honor Board for disciplinary action, including failure of the course and even expulsion.

Attendance and Punctuality

Regular and punctual attendance is required. If you need to miss class for any reason, please inform the instructor ahead of time if possible. Please sit near the door to minimize the disruption if you need to arrive late or leave early. If you have a serious illness, please do not come to class. Take care of yourself first.

Inclement Weather

On bad-weather days, consult the University's homepage for cancellation information. If the University is open, we will be having class.

Assignments

1. All assignments will be submitted ***electronically*** to me at jkinney3@gmu.edu no later than 7:20 pm the day they are due.
2. If you have a reason for missing class, especially one with an in-class examination or book discussion, you must contact the instructor before the date and have him consent to your absence if you wish to make up the work. Be prepared to show documentation if you miss an assignment and want a make-up.
3. Unless you make other arrangements with the instructor, late papers will be penalized one full letter grade for each day of tardiness.

Decorum

1. In every class meeting, students are expected to be intellectually engaged, to behave in a professional manner, and to be respectful of others.
2. **No sleeping, texting, unrelated internet surfing, instant messaging, e-mail correspondence, talking, giggling, smirking, or any other form of non-class related activity or misuse of electronic technology will be tolerated during class meetings.** Students who behave in the ways described here will be warned the first time and may be dismissed from class if the behavior persists.
3. Note-taking on laptops is permitted, but to prevent internet surfers from distracting other students, **all laptop users are required to sit at the back of the room behind everyone else.**

Disabilities

If you are a student with a disability and you need academic accommodations, please see me privately and contact the Office of Disability Resources (<http://ods.gmu.edu>) at 703-993-2474. All academic accommodations must be arranged through that office. If you anticipate needing any type of accommodation in this course or have questions about physical access, please talk to me as soon as possible (though you can wait until office hours, in the interest of privacy).

Diversity

George Mason University promotes a learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study and personal growth. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, and perspectives. Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected.

Schedule:**Week 1-January 21**

Introduction, Course Requirements, and Historiography
Balloon flight and the origins of heavier-than-air flight, 1783-1895

Week 2-January 28

The Invention and the Early Development of the Airplane, 1896-1903
The Early Flight Era, 1903-1914
Read: Bednarek, Preface, Chapter 1
Higham, Introduction, Chapter 1
[Kinney, Introduction, Chapter 1]

Week 3-February 4

World War I: The First Air War, 1914-1918
Read: Higham, Chapter 2
[Kinney, Chapter 2]

Week 4-February 11

An Aeronautical Revolution during A Golden Age of Flight, 1918-1938: Aviation, Society, and the Spectacle of Flight
The Role of Government and the Aeronautical Design Revolution
Read: Bednarek, Chapter 2
Heppenheimer, Introduction, Chapters 1-3, 5
Higham, Chapter 3
[Kinney, Chapter 3]

Week 5-February 18

Golden Age: The Emergence of the Modern Aviation Industry
Interwar to World War II
RESEARCH PAPER TOPIC THESIS AND BIBLIOGRAPHY DUE

Week 6-February 25

Discussion of *Spirit of St. Louis*.
BOOK/FILM SUMMARY DUE

Week 7-March 4

World War II: Naval Aviation

World War II: Strategic Bombing and the Morality of War

Read: Bednarek, Chapter 3

Higham, Chapters 4-5

[Kinney, Chapter 4]

SHORT EXAM #1

Week 8-March 11

Spring Break, Monday March 9-Sunday, March 15

Week 9-March 18

World War II: Culture and Society

World War II: The African-American Experience

World War II: From “Rosie the Riveter” to “Fifinella”: Women in World War II Aviation

Week 10-March 25

The Air Age and the New Jet Technology

Helicopters

Read: Heppenheimer, Chapter 4-6

Higham, Chapter 6

[Kinney, Chapter 5]

Week 11-April 1

Special Topics Discussion

Week 12-April 8

The Cold War, the Atomic Menace, and the emergence of the Aerospace Industry

Cold to Hot: The Air War in Korea and Vietnam

Airpower in the Post-Vietnam World, 1975-2000

Read: Heppenheimer, Chapter 7-9

Higham, Chapter 7

[Kinney, Chapter 6]

Week 13-April 15

Postwar Trends in Commercial Aviation

The World Aerospace Industry, 1980-2000

Read: Heppenheimer, Chapter 10-12

Higham, Chapter 8

[Kinney, Chapter 7]

Week 14-April 22

The Airplane for Everyman: General Aviation in the United States

Read: Bednarek, Chapters 4-5

[Kinney, Chapter 8]

Week 15-April 29

Conclusion, Class Discussion, and Review: Was the airplane the most significant technology of the twentieth century?

Read: Heppenheimer, Afterword

Higham, Chapter 9

[Kinney, Conclusion]

SHORT EXAM #2

Exam Day-Wednesday May 6 7:30 pm

RESEARCH PAPER DUE **by e-mail**

Short Exams:

Students will take two short exams for a total of 30% toward your final grade. They will consist of multiple choice, brief identification, and concise essay questions. The goal for these examinations is to show your ability to synthesize the readings, lectures, and in-class discussions.

Participation:

Students will be graded individually for their participation in general class discussions and for their contribution to the weekly topic discussions, which will constitute 15% of the final grade. Starting in Week 3, students will make informal short presentations to the class on a topic related to that week's primary theme to generate class discussion. The ideal would be highlighting an artifact, book, website, or film that would enrich the class experience. Selection of the week you will present will be on a first-come, first-served basis.

Research Paper Guidelines:

Each student will conduct an independent study of a significant aspect of aviation history that will generate an 8 page research paper. The project constitutes 35% of your final grade. Overall, the papers and presentations must stress the history of flight within a broader context, which includes perspectives on culture, economics, politics, society, technology, and war.

You are required to use the Chicago citation format for endnotes as outlined in guides such as *A Pocket Style Manual* by Diana Hacker. I strongly urge you to contact the University Writing Center (<http://writingcenter.gmu.edu/>) to assist you in writing your paper.

Students can select topics based on the list below on a first-come, first-serve basis. A paragraph stating your research topic, including a bibliography of at least 8 scholarly works is due **electronically February 18** and will count 5% of your final grade. The final papers are due **electronically on Wednesday, May 6 at 7:30 pm.**

Lighter-than-air Flight, 1783-2003	The Culture of Aviation in the 20th Century
Flight before Wilbur and Orville, 1799-1896	The Turbojet Revolution, 1945-1960
The French and the Birth of Flight	The X-Planes and Flight Research, 1945-1990
The Aerial Age, 1908-1914	The Air War in Korea
The First War in the Air, 1914-1918	The Air War in Vietnam
The U.S. Government and the Airplane, 1920-40	Commercial Aviation Enters the Jet Age
Charles A. Lindbergh and American Aviation	Private Flying in the United States
The Battle of Britain, 1940	A History of Gliding
The Air War in Europe, 1939-1945	A History of the Helicopter
The Air War in the Pacific, 1941-1945	A History of Aerodynamics
The Enola Gay and the First Atomic Bomb	A History of Aircraft Structures
The Minority Experience in Aviation	A History of Aircraft Propulsion
	A History of Aircraft Control

Book and Film Review Guidelines:

Students will read Charles A. Lindbergh's *The Spirit of St. Louis*, compare and contrast it to the Hollywood adaptation, submit a 1-2 page summary, and discuss the work in class during Week 6. The assignment constitutes 15% of the final grade. The review is due **electronically** on **Wednesday, February 25 at 7:20 pm**. Bring a copy to your class for reference.

What to consider while writing the review:

1. What questions does the book/film seek to answer?
2. What's the significance of the question?
3. What's the main body of evidence?
4. Brief summary of the book and film.
5. Author's conclusions.

Beyond that, consider these points:

1. Gaps or weaknesses in logic or conclusion.
2. What further questions does the book invite?
3. When comparing with other books, how do these writers ask and interpret questions? How do they differ in how they ask their questions?

Extra Credit Film Review:

Students will write a 1 page review of an aviation-themed movie (to be approved by the instructor) due anytime during the semester for up to three points to be added to the final grade. The main point of the exercise is to summarize the plot and place the film within an appropriate historical context (i.e., What does the film say about the time it represents as well as the time in which it was made?). Use the review guidelines provided to you for the book summary/discussion assignment as a model.

Potential movies to review:

Hell's Angels (1930)
Test Pilot (1938)
Captains of the Clouds (1942)
Strategic Air Command (1955)
The Great Waldo Pepper (1975)
Top Gun (1986)
Memphis Belle (1944/1990)
The Tuskegee Airmen (1995)
October Sky (1999)
Dark Blue World (2001)
Sky Captain and the World of Tomorrow (2004)
The Aviator (2005)
Flyboys (2006)
The Red Baron (2008)
Red Tails (2012)
Unbroken (2014)

INTRODUCTORY QUIZ—Week 1

Why study aviation history?

What are the top 5 technologies of the 20th and early 21st centuries?

1. _____
2. _____
3. _____
4. _____
5. _____

What are the top 5 events of the 20th and early 21st centuries?

1. _____
2. _____
3. _____
4. _____
5. _____

What is “technology”?

Historian of technology Melvin Kranzberg said, “Technology is neither good nor bad; nor is it neutral.” What do you think that phrase means?

Who was the first to fly in the earth’s atmosphere?

Can you identify a significant craft from aviation history?

Can you identify a significant individual from aviation history and discuss their importance to the history of flight?

What do you think is the most important event in aerospace history and what is its importance to world history overall?

When was the last time you flew in an airplane?