COURSE DESCRIPTION FOR:

9336 STANDARDS 2005 HISTORY OF AVIATION

Standards:	Technical Reading Technical Writing
Open To:	All aviation students Grades 9 to 12
Prerequisite:	Introduction to the Aviation Industry.
Note:	This is a 1.5 credit course, which meets 1 period each day.

This class offers an in depth study of the history of the aviation industry from 1200BC to 1958. The student will study the growth and development of aircraft, their systems and support structures that has made this industry what it is today. As well as researching aircraft built during this time, they will also study the people who became famous as a result of their passion and belief in their dreams. In the Greek myth, Icarus proved the dangers of sticking feathers to himself with a desire to fly like a bird. But 100 years ago, Wilber and Orville Wright ushered in modern aviation with not much more; they stretched a little white muslin cloth over a spruce wood skeleton, cranked up a homemade 12 h.p. gasoline engine, and took off for the sky. Just barely making it.

On December 17 1903 the brothers four short hops near Kitty Hawk, NC. Ranging in length from 120 to 852 feet changed the world. These were the first controlled, sustained flights in a heavier-than-air flying machine. Today, aviation continues to merge art and science, mystery and mathematics. It has brought the world closer together, nearly eliminating geographical isolation, brought tourism to the masses, expanded and speeded up commerce, and widened the horizons of everyone from poets to politicians. But it has also transformed warfare, making it more lethal, and handed to terrorists a new and awful weapon. And for all its practical feats and flaws, it has retained a magical hold on the human imagination.

Course Syllabus for History of Aviation.

Semester in Length, 89 hours, for 1.5 credits

Statement of Purpose:

The History of Aviation course explores the period of time from 1200BC to 1958

Students completing this course will be well conversed and knowledgeable about the following:

The heritage of flight
The hot air balloon invention
The period before World War I
The Wright Brothers
World War I
The golden age of aviation
World War II
Post World War II

The purpose of this course is to give the student the student an insight on what evolution means in regards to the development of the airplane.

Course Goals:

After completing this course, students will be able to:

- Develop skills in affective research.
- Develop the necessary skills to present to the class findings from research assignments.
- Understand the emotions and what drives inventors and pioneers.
- Be able to in an organized manner, take notes and understand referencing from a text.
- Develop an understanding what progression and evolution means when thinking in terms of inventions.
- The joy of being a historian
- Develop an appreciation of museums and historical artifacts.
- Develop team research and presentation skills and apply them.

Instructional Units:

This course will be developed around the following units of instruction.

- Unit # 1: The heritage of flight: Early scientific research, basic scientific research and the developing airplane.
- Unit # 2: The history of hot air balloons.
- Unit # 3: The period before World War I, aviation pioneers like Cayley, Pearce, Lillenthal and Langley.
- Unit # 4: The Wright Brothers.
- Unit # 5: Aviation during the period of World war I
- Unit # 6: The Golden age of aviation.
- Unit # 7: The period of World War II.
- Unit # 8: Post World War II.
- Unit # 9: The rich history of Minnesotan aviation.
- Unit #10: The Smithsonian Institute.
- Unit #11: The birth of the "Space Race"

Method of Instruction:

Using a structured method of instruction, this course will require students to "wear the hat" of a historian, and embrace this course with the necessary academic rigor embedded as the units are covered. Each lesson will be theory based and students will question, asking when, why, how, and where. Attention will be given to the different learning styles of the student.

Evaluation System:

The student will be assessed and evaluated on each of the units covered. As the objective of the unit is taught, the student will be preparing for the testing of the objectives relating to the objectives taught. Only the objectives covered will be tested.

Students with poor reading skills, or have barriers to communication may have the opportunity to be assisted at testing time by an adult reader.

All assessment processes should provide the students on feedback, their strengths, and weaknesses and where improvements can be made.

Grading System:

The following scale scores all tests, practical applications and assignments;

90-100% = A, 80-90% = B, 70-80% = C, 60-70% = D and 0-59% = F.

Unit tests will account for 50% of the overall grade, 2 tests 25%, and assignment projects will account for the remaining 25%.

Resource List:

- Working handouts, historical articles,
- Curriculum and course information sheets and materials.
- Textbooks, periodicals and historical references.

Tools, Supplies and Equipment:

All instructional materials will be made available to all students. However, the student will be encouraged to provide note-taking materials, and will be asked to provide a model kit airplane for a research assignment.