

Transcripts + Answer Key

Academic Lecture One: John Adams

In three remarkable careers--as a foe of British oppression and champion of Independence (1761-77), as an American diplomat in Europe (1778-88), and as the first vice-president (1789-97) and then the second president (1797-1801) of the United States--John Adams was a founder of the United States. Perhaps equally important, however, was the life of his mind and spirit; in a pungent diary, vivid letters, learned tracts, and patriotic speeches he revealed himself as a quintessential Puritan, patriarch of an illustrious family, tough-minded philosopher of the republic, sage, and sometimes a vain, stubborn, and vitriolic partisan.

John Adams was born in Braintree (now Quincy), Mass., on Oct. 30, 1735, in a small saltbox house still standing and open to visitors. His father, John Adams, a deacon and a fifth-generation Massachusetts farmer, and his mother, the former Suzanna Boylston, were, their son wrote, "both fond of reading"; so they resolved to give bookishly inclined John a good education. He became the first of his family to go to college when he entered Harvard in 1751. There, and in six further years of intensive reading while he taught school and studied law in Worcester and Boston, he mastered the technicalities of his profession and the literature and learning of his day. By 1762, when he began 14 years of increasingly successful legal practice, he was well informed, ambitious, and public spirited.

His most notable good fortune, however, occurred in 1764 when he married Abigail Smith. John Adams's marriage of 54 years to this wise, learned, strong-willed, passionate, and patriotic woman began the brilliant phase of Adams family history that produced their son John Quincy, his son Charles Francis, his sons Henry and Brooks, and numerous other distinguished progeny.

In 1761, John Adams began to think and write and act against British measures that he believed infringed on colonial liberties and the right of Massachusetts and the other colonies to self-government. A pamphlet entitled *A Dissertation on the Canon and the Feudal Law* and town instructions denouncing the Stamp Act (1765) marked him as a vigorous, patriotic penman, and, holding various local offices, he soon became a leader among Massachusetts radicals. Although he never wavered in his devotion to colonial rights and early committed himself to independence as an unwelcome last resort, Adams's innate conservatism made him determined in 1770 that the British soldiers accused of the Boston Massacre receive a fair hearing. He defended the soldiers at their trial. He also spoke out repeatedly against mob violence and other signs of social disintegration.

In 1774-76, Adams was a Massachusetts delegate to the Continental Congress in Philadelphia. His speeches and writings (especially a newspaper series signed "Novanglus" in 1775) articulating the colonial cause and his brilliant championing of American rights in Congress caused Thomas Jefferson to call him the "Colossus of Independence." Adams helped draft the Declaration of Independence, secured its unanimous adoption in Congress, and wrote his wife on July 3, 1776, that "the most memorable Epoch in the History of America has begun."

McGranahan, Ronald W. "The American Revolution Home Page: John Adams." 1998.

<http://webpages.homestead.com/revwar/files/ADAMS.HTM> (July 17, 2001)

1. With what topic is this lecture primarily concerned?

A biography of John Adams.

The American revolution.

The Stamp Act of 1765.

The drafting of the Declaration of Independence.

(#1)

(The lecture gives a biographical sketch of the life of John Adams, thus making answer one correct.)

2. What can be inferred about the education of John Adam's family?

No one else had gone to college prior to his entering Harvard.

His family was well-educated.

Most of his family were politicians.

Majoring in agriculture, the rest of his family became farmers.

(#1)

(Since he became the first in his family to go to college when he entered Harvard in 1751, it can be inferred that no one else in his family had gone. Therefore, answer one is correct.)

3. Which character trait does not describe Abigail Smith?

Wise.

Passionate.

Uneducated.

Patriotic.

(# 3)

(It is mentioned that she was a wise, learned, strong-willed, passionate, and patriotic woman. It is not mentioned that she was uneducated, thus making answer three correct.)

4. For what purpose was the pamphlet titled "A Dissertation on the Canon and the Feudal Law" written?

To hold on trial all those responsible for the Boston Massacre.

To denounce the Stamp Act of 1765.

To repudiate mob violence.

To demand an end to social disintegration.

(#2)

(A pamphlet entitled A Dissertation on the Canon and the Feudal Law and town instructions denouncing the Stamp Act (1765)...Therefore, the purpose of the pamphlet was to denounce/condemn the stamp act, thus making answer two correct.)

5. What topic will the professor most likely discuss next?

The American Revolution.

The Civil War.

The Declaration of Independence.

Modern day Philadelphia.

(#3)

(Since it says near the end of the lecture that Adams helped draft the Declaration of Independence, secured its unanimous adoption in Congress, and wrote his wife on July 3, 1776, that 'the most memorable Epoch in the History of America has begun,' it can be inferred that the professor will probably talk about that next. Therefore, answer three is correct.)

Academic Lecture Two: The Sun

The primary source of energy for all living things on the earth is the sun. The energy received from the sun travels 150 million kilometers to reach the earth. This energy comes in two forms: light and heat. Heat energy cannot be captured directly by the plants or animals. But the heat energy does warm up the non-living surroundings of plants and animals.

Many animals also directly use heat energy to control their body temperature. Reptiles, such as snakes, lie out in the sun to warm up their bodies. While this heat helps to warm the bodies of animals, there is not enough energy to meet all the needs of an animal. To obtain this energy, the animal requires food, which can be broken down in the animal's body to provide the necessary energy for the animal's life processes.

Only plants can capture light energy directly. Through the process of photosynthesis, plants convert the light energy into stored energy. Because green plants can manufacture their own food, plants are called autotrophs or self-nourishing. Photosynthesis is possible because green plants contain an energy-capturing substance called chlorophyll. The plant gets its green color because chlorophyll is green. Many seaweeds and other plants that do not appear to be green also have chlorophyll and therefore can convert the sun's energy into food. In these plants the greenness is hidden by other pigments.

The chlorophyll captures the light energy and uses this energy to build carbohydrates from simple raw materials (water, carbon dioxide and minerals). Carbohydrates are complex energy-storing materials that the plant can use to sustain its life processes. The raw materials that are needed for photosynthesis are the same raw materials that make up carbohydrates-carbon, hydrogen and oxygen. The carbon dioxide (CO₂) breathed out by animals is the source of carbon © and oxygen (O₂). Hydrogen (H₂) is taken from water (H₂O). These raw materials enter the plant through its roots and leaves. Carbon dioxide is taken in through pores, called stomata, in the leaf's surfaces. Water enters the plants through the roots and is channeled up the stem and into the veins of the leaves. In the case of water plants, there is water all around the plant. The raw materials are dissolved in the water and taken into the plant simply through any surface.

As you read about the process of photosynthesis, you will notice that some sources give glucose, a sugar, as the final product. Other sources state that the final product is carbohydrates. In fact, both are correct. Glucose is a type of carbohydrate.

Carbohydrates are compounds composed of carbon, hydrogen and oxygen atoms. Photosynthesis is the process that breaks down the raw materials, carbon dioxide (CO₂) and water (H₂O), into atoms of carbon (C), hydrogen (H) and oxygen (O₂) and then reforms these atoms into molecules of food that the plant can use. A molecule is a compound or group of atoms. By recombining the atoms of carbon, hydrogen and oxygen in different combinations, the plant creates the different carbohydrates. The sugars, glucose and fructose, are simple carbohydrates. Starch and cellulose are complex

carbohydrates. A simple carbohydrate consists of just a few atoms of carbon, hydrogen and oxygen, while complex carbohydrates consist of many of each of the three basic atoms.

Glucose is a simple carbohydrate that consists of 6 atoms of carbon, 12 atoms of hydrogen and 6 atoms of oxygen. The formula for glucose is usually written as $C_6H_{12}O_6$. Glucose, once manufactured by the plant, is used to create many of the more complex carbohydrates.

Alien Explorer Home Page. "Photosynthesis." 1999.

<http://www.aliexplorer.com/ecology/topic3.html> (July 18, 2001)

1. What would be the best title for this lecture?

The powerful sun.

How plants capture the sun's energy.

Eating habits of plants and animals.

The essential life processes of animals.

(#2)

(The main idea of the lecture is photosynthesis, which is the process by which plants capture the sun's energy, thereby making answer two correct.)

2. What is the primary difference between plants and animals?

Animals do not require as much food.

Green plants are unable to manufacture their own food.

Animals can capture light energy directly.

Plants are able to convert light energy into stored energy.

(#4)

(To obtain this energy, the animal requires food, which can be broken down in the animal's body to provide the necessary energy for the animal's life processes. Only plants can capture light energy directly.)

3. What is chlorophyll?

A type of plant pigment.

A certain species of plant.

Ocean seaweed.

A complex carbohydrate.

(#1)

(The plant gets its green color because chlorophyll is green. Many seaweeds and other plants that do not appear to be green also have chlorophyll and therefore can convert the sun's energy into food. In these plants the greenness is hidden by other pigments.)

4. Which of the following is not a raw material needed for photosynthesis?

Carbon.

Hydrogen.

Oxygen.

Helium.

(#4)

(The raw materials that are needed for photosynthesis are the same raw materials that make up carbohydrates-carbon, hydrogen and oxygen.)

5. Which of the following are final products of photosynthesis?

Click on two answers.

Glucose.

Carbohydrates.

Sucrose.

Hydrogen.

(# 1 & 2)

(As you read about the process of photosynthesis, you will notice that some sources give glucose, a sugar, as the final product. Other sources state that the final product is carbohydrates. In fact, both are correct. Glucose is a type of carbohydrate.)

6. A compound of group or atoms refers to which answer?

Simple carbohydrate.

Complex carbohydrate.

Starch.

Molecule.

(#4)

(A molecule is a compound or group of atoms.)

7. What do plants use glucose for?

To manufacture chlorophyll.

As protection from the sun.

To create more complex carbohydrates.

Increased cell growth.

(#3)

(Glucose, once manufactured by the plant, is used to create many of the more complex carbohydrates.)

Academic Lecture Three: Politeness Strategies

In everyday conversation, there are ways to go about getting the things we want. When we are with a group of friends, we can say to them, "Go get me that plate!", or "Shut-up!" However, when we are surrounded by a group of adults at a formal function, in which our parents are attending, we must say, "Could you please pass me that plate, if you don't mind?" and "I'm sorry, I don't mean to interrupt, but I am not able to hear the speaker in the front of the room." In different social situations, we are obligated to adjust our use of words to fit the occasion. It would seem socially unacceptable if the phrases above were reversed.

According to Brown and Levinson, politeness strategies are developed in order to save the hearers' "face." Face refers to the respect that an individual has for him or herself, and maintaining that "self-esteem" in public or in private situations. Usually you try to avoid embarrassing the other person, or making them feel uncomfortable. Face Threatening Acts (FTA's) are acts that infringe on the hearers' need to maintain his/her self esteem, and be respected. Politeness strategies are developed for the main purpose of dealing with these FTA's. What would you do if you saw a cup of pens on your teacher's desk, and you wanted to use one, would you

A: say, "Ooh, I want to use one of those!"

B: say, "So, is it O.K. if I use one of those pens?"

C: say, "I'm sorry to bother you but, I just wanted to ask you if I could use one of those pens?"

D: Indirectly say, "Hmm, I sure could use a blue pen right now."

There are four types of politeness strategies, described by Brown and Levinson, that sum up human "politeness" behavior: Bald On Record, Negative Politeness, Positive Politeness, and Off-Record-indirect strategy. If you answered A, you used what is called the Bald On-Record strategy which provides no effort to minimize threats to your teachers' "face." If you answered B, you used the Positive Politeness strategy. In this situation, you recognize that your teacher has a desire to be respected. It also confirms that the relationship is friendly and expresses group reciprocity. If you answered C, you used the Negative Politeness strategy which similar to Positive Politeness in that you recognize that they want to be respected. However, you also assume that you are in some way imposing on them. Some other examples would be to say, "I don't want to bother you but..." or "I was wondering if ..." If you answered D, you used Off-Record indirect strategies.

The main purpose is to take some of the pressure off of you. You are trying not to directly impose by asking for a pen. Instead you would rather it be offered to you once the teacher realizes you need one, and you are looking to find one. A great example of this strategy is something that almost everyone has done or will do when you have, on purpose, decided not to return someone's phone call, therefore you say, " I tried to call a hundred times, but there was never any answer."

Explore! Sociolinguistics. "Politeness." February 25, 2001.

<http://www.aliexplorer.com/ecology/topic3.html> (July 18, 2001)

1. What is the main idea of this conversation?

The importance of respect in the spoken language.

How to apologize to others.

Politeness strategies in conversational English.

Why protecting one's feelings is important.

(#3)

(The main idea of this lecture is politeness, thus making answer choice three correct.)

2. What is face?

The respect that an individual has for himself.

The respect an individual has for others.

A embarrassing situation.

The polite act of refusing someone else's request.

(#1)

(Face refers to the respect that an individual has for him or herself, and maintaining that "self-esteem" in public or in private situations.)

3. What are face threatening acts?

Physical violence inflicted on others.

A verbal argument between two strangers.

Acts infringing on the hearers' need to maintain his self esteem.

A polite way of protecting others' feelings.

(#3)

(Face threatening acts (FTA's) are acts that infringe on the hearers' need to maintain his/her self esteem, and be respected.)

4. What politeness strategy would a person be using if he said, "So, is it O.K. if I borrow your notes for a second?"

Bald On Record.

Negative Politeness

Positive Politeness

Off-Record-indirect strategy.

(#3)

(It is learned that if a speaker says "So, is it O.K. if I use one of those pens?" he will be using positive politeness, the act of recognizing that the speaker has a desire to be respected. It also confirms that the relationship is friendly and expresses group reciprocity.)

5. What politeness strategy would a person be using if he said, "So, I got to have one of those pens?"

Bald On Record.

Negative Politeness

Positive Politeness

Off-Record-indirect strategy.

(#1)

(It is learned that if a woman says "Ooh, I want to use one of those!", she would be using bald on record, the act of recognizing that the other speaker has a desire to be respected. This type of speech also confirms that the relationship is friendly and expresses group reciprocity.)

Academic Lecture Four: Gay Marriage

According to Webster's New Collegiate Dictionary, a family is "the basic unit in society having as its nucleus two or more adults living together and cooperating in the care and rearing of their own or adopted children." Despite this all-inclusive definition, a lesbian or gay couple -- with or without children -- is not the image conjured up when most people create a picture of a family. Nevertheless, lesbian and gay couples (and their children) consider themselves families. And over the past 30 years, same-sex couples have sought societal recognition of their families. It began in the early 1970s, when lesbian and gay couples applied for marriage licenses, asked courts to allow one partner to adopt the other, and took other steps to legally cement their relationship. Most of these efforts failed.

By the mid-1980s, the emphasis changed to seeking "domestic partnership" recognition for same-sex couples. This effort continues, with increasing strength, in the new century. And the desire to marry has again emerged. Some couples are applying to the state for marriage licenses and suing their states when their requests are denied. Others (many others) are participating in their own ceremonies, sanctioned by their friends, families and spiritual communities.

It's interesting to note that the lesbian and gay community is itself divided over the marriage issue. The community consists of an enormous number of people of every conceivable age, race, religion, lifestyle, income and opinion. It is of course impossible to convince such a large and diverse group of people to throw their political weight behind any one issue. For example, some argue that regardless of any individual's desire to get married, the community as a whole should support official recognition of their right to do so. On the other hand, there are those who decry marriage as a sexist and patriarchal institution that should be avoided at all costs. Still others are enjoying a higher level of economic prosperity than the average American and don't feel constrained in any way by a lack of marriage rights. Another group doesn't want to risk repercussions while perhaps another group just doesn't care one way or the other.

In 1978, the United States Supreme Court declared marriage to be of fundamental importance to all individuals. The court described marriage as one of the basic civil rights of man and the most important relation in life. The court also noted that the right to marry is part of the fundamental right to privacy in the U.S. Constitution.

Although marriage has been declared a fundamental right, no state yet recognizes same-sex marriages. However, change is on the horizon. In December 1999, the Vermont Supreme Court ordered its state legislature to come up with a system providing same-sex couples with traditional marriage benefits and protections.

In response to the Supreme Court's mandate, the Vermont legislature passed the Vermont Civil Union law, which went into effect on July 1, 2000.

Nolo: Law for All. "Same-Sex Marriage: A History of the Law, A look at the legal landscape of same-sex marriages." 2001.http://www.nolo.com/encyclopedia/articles/mlt/same-sex_marriage.html (July 18, 2001).

1. What is the main idea of this lecture?

Marriage patterns in the United States.

The legal history of same sex marriages

Homosexuality.

The reasons for divorce in the United States.

(#2)

(In the beginning of the lecture, it is learned that over the past 30 years, same-sex couples have sought societal recognition of their families. A chronological legal history of same sex marriage is given to support this claim, thus making answer two the main idea.)

2. According to the lecture, why might lesbian and gay couples apply for marriage licenses?

To make it more difficult for their to break up.

To get a reduction in their state and national income taxes.

To bring societal recognition to them and their families.

To encourage more people to seek the alternative lifestyle.

(#3)

(It is learned that over the past 30 years same-sex couples have sought societal recognition of their families; thus, they began to apply for marriage licenses.)

3. What is true about the gay and lesbian community regarding the same-sex marriage issue?

Unitedly, they agree marriage should be legally recognized among gays?

Similar to other communities, there is considerable disagreement about whether or not gays should be legally allowed to marry.

Most are not enjoying a high level of economic prosperity to have an opinion on the issue.

Most believe marriage is a sexist institution and should not be allowed among gays or heterosexuals alike.

(# 2)

(Answer two is best. For example, some argue that regardless of any individual's desire to get married, the community as a whole should support official recognition of their right to do so. On the other hand, there are those who decry marriage as a sexist and patriarchal institution that should be avoided at all costs. Still others are enjoying a higher level of economic prosperity than the average American and don't feel constrained in any way by a lack of marriage rights. Another group doesn't want to risk repercussions while perhaps another group just doesn't care one way or the other. Since so many different options are given, it is learned that there is a lot of disagreement concerning this issue.)

4. What can be learned from the 1978 United States Supreme Court's decision regarding marriage?

Click on two answers.

It is a right given to all.

It is a privilege which must be earned.

It is of fundamental importance.

It is the second most important relation in life.

(#1 & 3)

(In 1978, the United States Supreme Court declared marriage to be of fundamental importance to all individuals. The court described marriage as one of the basic civil rights of man and the most important relation in life. The court also noted that the right to marry is part of the fundamental right to privacy in the U.S. Constitution.)

5. What can be inferred from this lecture?

All states recognize different-sex marriages in the United States.

No state will ever recognize same-sex marriages.

Several states now recognize same-sex marriages.

The United States legislature is not preparing laws to accept same-sex marriages.

(#1)

(Although marriage has been declared a fundamental right, no state yet recognizes same-sex marriages, which implies states already recognize different sex marriages. However, change is on the horizon.)

Academic Lecture Five: The Physics of Airplane Flight

Physics explains how an airplane flies. As the plane uses jet engines, or even a propeller in some cases, to move itself forward, air rushes by the wing. The wing is designed in such a shape that it sends much over the top of the wing, causing a high air pressure up there. This high air pressure is demonstrated by lines (representing air) close together. As the air continues along, and the wing thins out, the air pressure drops again. A high-pressure area (below the wing) always moves toward a low-pressure area (above the wing). And so the high-pressure lifts the plane into the air.

Whenever a plane is in flight, there are four forces acting on it: gravity, lift, drag, and thrust. Gravity, of course, is natural, pulling the plane toward the ground. Lift is what is caused when air goes past the wing; it opposes gravity. Drag is natural and opposes the plane's forward movement. This is the same as air resistance. The fourth force, thrust, is caused by the engine or propeller and is what pulls the plane forward, opposing drag. It's a vector problem; it's physics. If the pilot can make the force of the lift more than the force of gravity, the plane will come off the ground. The greater difference there is between the thrust and the drag, (thrust being greater, of course), the faster the plane will move. The

pilot can change the altitude by either increasing or decreasing the power of the engines. When descending, the pilot will decrease the engine power, which will reduce the plane's thrust. This reduction in thrust also reduces lift and increases drag, further slowing the plane. To change the airplane's direction, the pilot uses controls called ailerons. These are flaps on the wings. By raising or lowering these flaps, the pilot increases or decreases the lift on each of the wings.

To change the airplane's direction, the pilot uses controls called ailerons. These are flaps on the wings. By raising or lowering these flaps, the pilot increases or decreases the lift on each of the wings. If an aileron is up, it decreases the lift on that wing. If it's down, it increases the lift. If a pilot wants to bank right, he will put the right aileron up and the left aileron down. This will increase the lift on the left wing and decrease it on the right, making the plane bank to the right. Since lift always occurs perpendicular to the surface of the wing the lift acts at an angle and the plane turns accordingly. Because the lift is not acting directly against gravity, the plane also reduces in altitude. The pilot must increase engine power, which increases thrust which increases lift over again, it makes this drop in altitude manual.

And there you have it: the physics of flying an airplane.

Steen III, Robbie. "Welcome to Physics of Flying." June 8, 1998
<http://www.kent.wednet.edu/staff/trobinso/physicspages/PhysOf1998A/Flight-Steen/index.htm> (July 18, 2001).

1. What is the main purpose of this lecture?

To give someone a short lesson in aviation.

To show how an airplane changes directions.

To explain the physics involved in flying an airplane.

To show the forces which act on the wing of an airplane.

(#3)

(The purpose of this lecture is explaining how an airplane flies through the use of physics.)

2. Which force pulls the plane toward the ground?

Gravity.

Lift.

Drag.

Thrust.

(#1)

(It is learned that gravity is natural, pulling the plane toward the ground)

3. Which force pulls the plane forward?

Gravity.

Lift.

Drag.

Thrust.

(#4)

(It is learned that the fourth force, thrust, is caused by the engine or propeller and is what pulls the plane forward, opposing drag.)

4. What will happen if the plane cannot overcome the force of gravity upon takeoff?

The plane will take off.

The plane will take more time to get off the ground.

The plane will fly slower.

The plane will not fly.

(#4)

(If the pilot can make the force of the lift more than the force of gravity, the plane will come off the ground, which means it will fly. And it will not fly if it doesn't overcome this force.)

5. Flaps on the wing are called what?

Rudders.

Ailerons.

Propellers.

Banks.

(#2)

(To change the airplanes direction, the pilot uses controls called ailerons. These are flaps on the wings.)