

Berkeley Late Spring Tournament—I Know Kung Fu (2004)  
Packet by UCLA (Steve Kaplan, Charles Meigs, Dwight Wynne)

## TOSSUPS

1. The pope recommended to Anatolius, Bishop of Constantinople and empress Pulcheria that this council not take place, believing the matter already settled. It opened with Paschasinus, bishop of Dorylaeum, presiding. Leo I would condemn Dioscorus of Alexandria and Eutyches, as well as their doctrine, a reaction against and complete opposite of the Nestorian doctrine. FTP, name this early Christian council which condemned the principle of Monophysitism, held in 451 on the Asian side of the Bosphorus.

Ans: **Council of Chalcedon**

2. Plants utilizing this strategy include pineapple and succulents. A similar strategy involves the use of bundle sheath cells; this strategy introduces a temporal separation between carbon-fixation and the Calvin cycle. During the nighttime, PEP carboxylase fixes CO<sub>2</sub>, which is incorporated into various organic acids, which collect in vacuoles until the stomata close during the day. FTP, name this water-conserving photosynthetic strategy first discovered in plants of the family Crassulaceae.

Ans: **Crassulacean acid metabolism or CAM photosynthesis**

3. He arrived in Prague the day the Munich Pact was signed, and after about a year he was transferred to Berlin, where he became interned once the U.S. entered World War II. Yet, he said that the isolation was not as bad as that he experienced as ambassador to the Soviet Union, which declared him persona non grata in 1952 for comparing the Soviet Union to Nazi Germany. He is best known for a policy which he first outlined in the Long Telegram, and made public in his anonymous *Foreign Affairs* article "The Sources of Soviet Conduct." For 10 points, name this man who proposed the policy of containment.

Ans: **George Frost Kennan**

4. Butumbundra, underage black prostitute, says that "Your money's on the dresser, chocolate," were the last words of Eli Jackson, co-founder of the Coalition for Moral Order. Several pieces of toast are pierced during the mustard-spreading lesson, which is followed by a surprisingly good impression of John Wayne's walk. Senator Keeley and his family cross-dress and escape the media during a rendition of "We Are Family." FTP, name this film with Nathan Lane and Robin Williams as a gay couple in charge of the title nightclub.

Ans: **The Birdcage**

5. One main character's last line is "That's too long for a play," referring to the length of time he must spend entertaining hospital patients. Despite that penance, he is by far the most logical of the main male characters, as shown by his reservations over the strictness of the oath he swears in Act 1, Scene 1. We never learn what he wrote to his love Rosaline, as he rips up the letter Costard mistakenly delivered to Jaquenetta. Dumaine, Longaville, Berowne, and the King of Navarre all break their oath not to deal with women for three years in, FTP, what 1598 Shakespeare play?

Ans: **Love's Labour's Lost**

6. The Casimir effect occurs because they have less available states between two uncharged metal plates than in vacuum. Many nuclear processes, including decay of eta-c (AY-tah SEE) particles, production of charm particles, and neutron beta decay, are mediated by them. The particle number operator does not commute with the Hamiltonian, so they are allowed by the Heisenberg Uncertainty principle, and represent fluctuations of vacuum energy. Always created as particle-antiparticle pairs, FTP name these particles that "borrow" energy from their surroundings and disappear quickly.

Ans: **Virtual particles**

7. It featured an obscure Italian front which saw the Italian navy defeated at the Battle of Lissa. It started directly because of the Gastein Treaty, which dealt with the administration of a northern province. In this war's aftermath, Friedrich Beust was appointed prime minister and the Ausgleich was signed. The war was ended by the Peace of Nikolsburg and saw the victors gain the province of Holstein, which had been the

impetus for the war. FTP, name this war with its most famous battle fought at Sadowa, which saw the mobilized Prussian army destroy the Austrians in about 49 days.

Ans: Seven Weeks' War (accept Austro-Prussian War before "Prussian" is mentioned)

8. One of this man's brothers-in-law is betrayed by Atli and dies tied up in a snake pit where he plays a harp with his toes. While cooking a heart, he burns his fingers; sucking them, he finds he can understand the birds, and on their advice he bathes in his slain foe's blood, becoming invulnerable except in a leaf-shaped patch on his back. Grimhild gives him the ale of forgetfulness, so he marries Gudrun and rides his horse through a ring of fire while disguised as Gunnar to woo the Valkyrie he really loves. FTP name this Norse hero who loves Brynhild, and kills Regin and the dragon Fafnir.

Ans: Sigurd the Volsung or Siegfried

9. In the Federal system, these represent an exception to jurisdictional mootness, and interlocutory appeals are allowed on the issue of certification. *Mullane* held that actual notice must be given to all parties affected. Governed by Rule 23 of the Rules of Civil Procedure, they must involve a group too large to be effectively joined. The named plaintiff must be certified to fairly and adequately protect the interests of those not directly involved in the proceedings. FTP name this type of lawsuit in which an individual sues on behalf of a large group of people who have all been harmed in a similar way.

Ans: Class Action Law Suits

10. Gerhard Gentzen proved their consistency in 1936 using transfinite induction. Their formulator considered his work in mathematical analysis more important than his work in symbolic logic and initially attributed them to Dedekind. When formulated as second-order statements, there are typically five of them, and the fifth essentially states the principle of mathematical induction. FTP, name this set of axioms postulated by and named after a 19th-century Italian mathematician, the most basic set of properties of natural numbers.

Ans: Peano axioms or postulates

11. When this character first appears, he is drunk, suffering from a cold, and wearing a "parti-striped dress" and a "conical cap with bells." Though the narrator often refers to him as "my friend," this man has offered the narrator a thousand injuries, and ventured upon insult, which calls for revenge. Taking advantage of this man's professed connoisseurship of wine, the narrator leads him down into the catacombs of the Montresors and entombs him there. FTP, name this character from "The Cask of Amontillado."

Ans: Fortunato

12. This Virginian studied law under Thomas Jefferson, and married Jefferson's granddaughter. He served as Private Secretary to Andrew Jackson, and was consul to Havana during the late 1830s. In the late 1840s he worked for the State Department and was sent to accompany the army in the Mexican War. He negotiated a truce in 1847, but no peace settlement could be reached and the war resumed. FTP name this diplomat who ignored his recall by President Polk to negotiate the Treaty of Guadalupe-Hidalgo.

Ans: Nicholas Philip Trist

13. Its composer described it by saying, "Imagine that the universe bursts into song. We no longer hear human voices, but those of the planets and suns which revolve." The audience does hear human voices, though, as it includes solos for three sopranos, two contraltos, a tenor, a baritone, and a bass. Its first movement is based on the hymn *Veni Creator Spiritus*, and its second and final movement takes its text from the last scene of Goethe's *Faust*. FTP, name this 1909 Gustav Mahler symphony, which at its premiere used of 171 orchestra members and an 850-member chorus.

Ans: Symphony No. 8 in E-flat or Mahler's Eighth Symphony or Symphony of a Thousand

14. The reference state for this element's standard enthalpy of formation is actually the least stable form, which has a tetrahedral structure. That allotrope burns on contact with air, and was used in early matches in spite of its toxicity; now a different allotrope is used. A network structure similar to graphite characterizes the violet or black form. FTP name this element which also has red and white allotropes, appears in group five below nitrogen, and has atomic symbol P.

Ans: phosphorus

15. In his campaign against the Cadusians, he accepted a challenge for single combat. Later becoming satrap of Armenia, he was called Artashata by the Babylonians. The incestuous son of Arsanes and Sisigambis, he was depicted staring at a famous opponent by Philoxenus of Eretria. The loss of the general Memnon led to his fall, after which he spent his last days running from Bessus, a noble who usurped his Achaemenid throne. FTP, name this loser of the battles of Granicus, Issus, and Gaugamela, who lost the Persian Empire to Alexander the Great.

Ans: Darius III Codomannus or Daravavahush III (prompt on Codomannus)

16. The title character encounters a fifty year old man who carries a crooked staff and bears a significant resemblance to him. This man states he has helped the title character's family for three generations, including helping his father set fire to a village in King Phillip's War. Upon rejecting the man, the title character enters a clearing where a dark ritual is taking place, and sees his wife Faith taking part. FTP name this story about a youthful Puritan, written by Nathaniel Hawthorne.

Ans: Young Goodman Brown

17. The town of this name, located on a coral island at the narrowest point of its namesake channel, was a national capital until 1907. Claimed by Vasco da Gama in 1498, it declined with the abolition of the slave trade and is now only the fourth-largest town in Nampula province. Larger cities in the nation of the same name include Inhambane, Garue, Xai-Xai, Tete, Quelimane, and Matola. FTP, give the shared name of the town and the nation, which has its capital at Maputo.

Ans: Mozambique or Mocambique (MOHS-AM-BEEK)

18. An episode of MTV Cribs revealed that he had a urinal in his master bedroom. He was thrown out of the High School McDonald's All-Star Game. After graduating from Simon Gratz, he went to the defending national champions; during his tenure, his team got dropped in the second round by BC but made it into the 1995 Final Four. He excels in a certain stat, once getting one while sitting on the bench and another without saying a word, both in a single game resulting in an ejection. FTP, name this former North Carolina star, now Detroit Piston after being traded from the Blazers, a consistent leader in technical fouls.

Ans: Rasheed Abdul Wallace

19. The second version of this language supported two kinds of subroutine parameter passing, call-by-value and call-by name, which was implemented by invisible address-returning functions called thunks. Its 1958 original version was also called the "International Algebraic Language," though it had no specific input-output statements. It shares its name with an eclipsing binary in the constellation Perseus whose name means "the demon" in Arabic. For 10 points, identify this computer language whose name is a contraction of "Algorithmic Language."

Ans: Algol

20. Its fifth principle states a desire to bring about improved labor standards, economic advancement, and social security for all. The second principle states a desire to see no territorial changes not in accord with the wishes of the people, which complements the first, which states that neither party seeks aggrandizement, territorial or otherwise. FTP name this document which anticipates the destruction of Nazi tyranny, a joint statement of goals made in 1941 by Churchill and Roosevelt.

Ans: Atlantic Charter

2004 Berkeley Late Spring  
UCLA

1. Name these characters and things from Dante's *Inferno* FTPE.

10) This man is Dante's guide through Hell and Purgatory.

Ans: **Virgil**

10) Virgil, like most of the Greek, Roman, and Musulman heroes and philosophers, is a permanent residence of this place, reserved for virtuous heathens.

Ans: **1st Circle** or **Limbo**

10) Dante and Virgil reach the 8th circle, Malebolge, featuring pimps, simoniacs, alchemists, and Ulysses, by flying down the back of this "filthy effigy of fraud," who shares his name with a triple-bodied giant featured in one of Hercules' labors.

Ans: **Gervon** (if someone gets this only off of the myth clue, feel free to call them a "filthy effigy of fraud")

2. Answer these related questions FTPE.

10) This 1908 case upheld an Oregon law limiting the number of hours women could work in certain occupations.

Ans: **Muller v. Oregon**

10) The 1905 case *In Re BLANK* allowed the federal government the authority to enforce an injunction to stop the strike issued against this famous labor leader, who ran for President five times as a Socialist.

Ans: **Eugene Victor Debs**

10) This man, a former Supreme Court Justice and a Harrison appointee, was born in Smyrna, Turkey, and was the first Supreme Court Justice from the state of Kansas. He wrote the opinions of the court in *Muller v. Oregon* and *In Re Debs*.

Ans: **David Josiah Brewer**

3. Answer these questions about codons and DNA translation for the stated number of points.

10) For 10 points, the start codon AUG (A-YOU-JEE) also codes for what amino acid?

Ans: **Methionine**

5) For 5 points, that codon was transcribed from what sequence of three DNA bases?

Ans: **TAC** or **thymine-adenine-cytosine**

10) Marshall Nirenberg deciphered the first codon when he found that the codon UUU codes for this amino acid.

Ans: **phenylalanine**

5) The codons UAA, UAG, and UGA do not code for amino acids. What do these codons signal?

Ans: **stop** (accept equivalents)

4. Answer these related questions for 10 points each.

10) In this experiment, John Watson loudly banged a metal bar behind the namesake baby's head, conditioning him to fear a white rat. The baby's fear was generalized to rabbits and Santa Claus whiskers.

Ans: **Little Albert experiment**

10) John Watson is generally considered the founder of this psychological movement that dismissed the internal aspects of thought to concentrate on the outward aspects.

Ans: **behaviorism**

10) This behaviorist hypothesized organismic or O-variables, such as drive and habit strength, that interact with stimuli to produce responses.

Ans: **Clark Leonard Hull**

5. FTPE, name the following members of the greatest cast in cinematic history, *The Exorcist III*.

10) This Academy Award winning star played Lt. Bill Kinderman. His last film role was in *Gloria*, but he might be better known for Academy Award-nominated turns in *The Hustler*, *Anatomy of a Murder*, and *The Hospital*.

Ans: **George C(ampbell) Scott**

10) Since the movie was about a serial killer operating in the D.C. suburb of Georgetown, this former NBA player and Gold Club patron was called to play the role of the Angel of Death in the film.

Ans: **Patrick Aloysius Ewing**

10) Also playing an angel, he made his American film debut in *The Exorcist III*, later going on to star in *Acapulco H.E.A.T.* and *Dude, Where's My Car?* as well as hawking pseudo-butter.

Ans: **Fabio Lanzoni**

6. Answer the following on *As I Lay Dying* FTSNOP.

5) This man wrote *As I Lay Dying*.

Ans: **William Faulkner**

10) This is the name of the family led by the dead matriarch Addie.

Ans: **Bundren**

5/15) 5 for one, 15 for both, name the possibly retarded youngest Bundren son who calls Addie a fish, and the youngest son of Addie and Rev. Whitfield who saves Addie's coffin from a burning barn.

Ans: **Vardaman** and **Jewel**

7. Answer the following questions about German leagues and associations, FTPE.

10) John of Saxony and Philip of Hesse were the founders of this league of German Protestant states that was eventually defeated at Muhlberg in 1547.

Ans: **Schmalkaldic League**

10) Known as King William's War in the American colonies and alternatively as the War of the Grand Alliance, this war lasted from 1689 to 1697 and was ended by the Peace of Ryswick.

Ans: **War of the League of Augsburg** or **The War of the Palatine Succession** or the **Nine Years' War**

10) Begun in 1834, it consisted of Prussia, Bavaria, Württemberg and other states, and was designed to limit the amount of customs barriers within a not yet unified Germany.

Ans: **Deutscher Zollverein** (prompt on **German Customs Union**)

8. Name these Rene Magritte works from descriptions for 10 points each.

10) The focal, and indeed, only object in this 1926 painting is a pipe, or more precisely, the image of a pipe. There is some writing underneath it.

Ans: **The Treachery of Images** or **The Betrayal of Images** or **The Treason of Images** (accept "Pictures" for "Images" in any of those three) or **Le Trahison des Images** (grudgingly accept "**Ceci n'est pas une pipe**" or "**This is not a pipe**;" DO NOT ACCEPT "**The Air and the Song**," as that has a wooden frame and smoke)

10) A green apple obscures most of the face of a man in a black suit.

Ans: **The Son of Man** or **Le Fils de l'Homme**

10) There are three main objects in this picture: a large rock on the left, an easel with a transparent canvas in the center, and a flaming tuba on the right.

Ans: **The Fair Captive** or **La Belle Captive**

9. Answer these questions about molecular bonding for 10 points each.

10) These antisymmetric combinations of basis atomic orbitals have higher energy than the basis orbitals. Electrons in one of these reduce the bond strength.

Ans: **antibonding molecular orbital**

10) This quantity is calculated by subtracting the number of antibonding electrons from the number of bonding electrons and dividing by two.

Ans: **bond order**

10) When atoms with very different valence electron energies bond, the bonding orbitals come primarily from one atom's atomic orbitals; the bonding electrons are effectively transferred to that atom, resulting in this type of bond, typically formed between metals and non-metals.

Ans: **ionic bond**

10. FTSNOP, answer the following about works of literature that feature the phrase "whited sepulchre."

10) Perhaps the best-known use of the term "whited sepulchre" is in this novel. It is believed that the term refers to Brussels, where the company Marlow worked for was located.

Ans: **Heart of Darkness**

10) In this play, Dr. Stockmann claims that "The Bath establishment is a whited, poisoned sepulchre..."

Ans: **An Enemy of the People**

5;5) FFPE, name the authors of *Heart of Darkness* and *An Enemy of the People*.

Ans: **Joseph Conrad** or **Józef Teodor Konrad Nalecz Korzeniowski**; and **Henrik Johan Ibsen**

11. Identify these British Prime Ministers FTPE.

10) This Prime Minister came to power in 1979 and led the Brits to glorious victory in the Falkland Islands.

Ans: **Margaret Thatcher**

10) This liberal served in the cabinet of Henry Asquith before himself becoming Prime Minister at the height of The Great War.

Ans: **David Lloyd George**

10) Despite being the Earl of Chatham, he was known as "The Great Commoner" and served as Prime Minister in two non-consecutive terms, much like his son did.

Ans: **William Pitt the Elder**

12. Answer the following on a discredited scientific theory FTPE.

10) Spallanzani's experiments helped disprove this theory, which held that life could arise from non-living matter. Mice supposedly came from dirty hay, while lice arose from sweat.

Ans: **spontaneous generation** or **Aristotelian abiogenesis**

10) This Italian's 1668 experiment using open, partially covered, and completely covered jars showed that maggots did not come from rotting meat but rather from flies laying eggs on the meat.

Ans: **Francesco Redi**

10) This Frenchman used S-shaped flasks to finish off the theory of spontaneous generation, as air but not microbes entered the flasks.

Ans: **Louis Pasteur**

13. FTPE, name these islands of the far north.

10) Discovered in 1607 by Henry Hudson and called Hudson's Touches, it has since been known as the Ile de Richelieu and Trinity Island, but is currently named for a Dutch sailor. It is currently a volcanic possession of Norway lacking permanent inhabitants.

Ans: **Jan Mayen**

10) An island with three settlements including the far northern Alert and the northernmost settlement in Canada, Grise Fiord, this island is home to the highest point in Nunavut, Barbeau Peak.

Ans: **Ellesmere Island**

10) This archipelago consists of two islands, descriptively named Severny and Yuzhny. It is a continuation of the Ural Mountains separating the Barents and Kara Sea.

Ans: **Novaya Zemlya** or **Nova Zembla** (note: Severny and Yuzhny mean northern and southern, respectively)

14. Identify these Mark Twain characters from descriptions FTPE.

10) This guy from Connecticut winds up at King Arthur's court, somehow.

Ans: **Hank Morgan** (either name acceptable; prompt on **Connecticut Yankee**, **A Connecticut Yankee in King Arthur's Court**, etc.)

10) This sadistic Native American is the villain in *Tom Sawyer*.

Ans: **Injun Joe**

10) This daughter in a feuding clan dies before Huck Finn moves in with her family. She used to create paintings and pottery.

Ans: **Emmeline Grangerford** or **Emmeline Grangerford**

15. Name these instruments one would not normally find in a symphony orchestra for 10 points each.

10) This instrument is the ancestor of the oboe. Thought to be Arabic in origin, it reached the height of its European popularity during the 13th to 17th centuries.

Ans: **shawm**

10) This drum's tone is set by applying a mixture of flour and water on the middle of the left side. Like the tabla, it is used in much of Indian classical music and is considered the earliest percussion instrument still in use.

Ans: **Mridanga** or **mridangam**

10) There are over forty aboriginal names for this wind instrument, many of which mean "bamboo." Made of bamboo or a eucalyptus branch hollowed by termites, it is typically over three feet in length and can produce sounds of frequency less than 100 Hz.

Ans: Didgeridoo or Didjeridoo or Didjeridu

16. Answer the following about nullification FTPE.

10) Unhappy with Northern protectionism, South Carolina called a state convention to nullify the Tariff of 1832 as well as this earlier tariff.

Ans: The Tariff of 1828, or The Tariff of Abominations

10) One of the leaders of the nullification movement was this man who resigned from the Senate to run for governor of South Carolina. He was replaced in the Senate by John Calhoun.

Ans: Robert Hayne

10) Passed in 1833, this bill authorized the President to send soldiers into South Carolina to enforce the Tariff.

Ans: Force Bill or Force Act

17. Identify these things that Seth Teitler loves FTPE.

10) Seth loves this type of soft drink, the diet variety of which is preferred by Lois on Malcolm in the Middle. Brands include IBC and Dad's.

Ans: root beer

10) Seth cherishes this 1996 second Weezer album that takes many of its themes from *Madame Butterfly*.

Ans: Pinkerton

10) Seth clutches to his bosom this character from *The Simpsons*, briefly known as Frostillicus, who advocates use of the sidewalk for regular walkin'.

Ans: Jasper

18. Answer these related questions FTSNOP.

10) The title character of this novel adopts the little Hephzibah as a replacement for the gold Dunstan Cass stole from him.

Ans: Silas Marner

10) In this poem, Mary tells Warren that Silas, the title character, has returned to help ditch the meadow. Warren finds his corpse.

Ans: The Death of the Hired Man

5;5) FFPE, name the authors of *Silas Marner* and "The Death of the Hired Man."

Ans: George Eliot or Mary Ann Evans and Robert Frost

19. Answer these questions about one city's hegemony over Greece, FTSNOP.

5) A phalanx 50 ranks deep on the left, and the charge of the Sacred Band, led to victory over the Spartans in 371 BCE, ending Spartan hegemony and bringing this city to prominence.

Ans: Thebes

10) FTP, name the 371 BCE which signalled the start of the Theban hegemony.

Ans: Leuctra

10/15) Ten for one, fifteen for both, name the Theban commanders primarily responsible for the Theban hegemony; one was the commander at Leuctra, the other routed the Spartans in 375 BCE at Tegyra.

Ans: Epaminondas and Pelopidas

20. It is the ejection of electrons from the surface of a substance when struck by light.

5) First for 5 points, name this effect whose explanation won Einstein his Nobel.

Ans: Photoelectric effect

5;15) 5 for one, 15 for both—name the man who discovered the photoelectric effect, and the man whose extensive experiments confirmed Einstein's explanation. The former was the first to produce electromagnetic radiation in the lab, and the latter conducted the oil-drop experiment.

Ans: Heinrich Rudolf Hertz and Robert Andrews Millikan

10) Electrons are ejected if the photon energy exceeds this quantity, the energy needed to remove an electron from the Fermi level to infinitely far from the metal surface.

Ans: work function