

# Homework 10: Deciding the Course of Actions

**Due Date: Friday, Apr. 27, 2018, 23:59**

## Optional Pair Work

### 60 Points

For this homework assignment, if you need more information on Kepner-Tregoe approach, refer to the course slides on decide the course of action and the “strategies for creative problem solving” book. The following problems have been chosen from the book.

#### **Problem 1: Situation Appraisal.** [20 points]

The four members of the Adams family live east of Los Angeles in a middle-class community. Tom Adams commutes to work in downtown Los Angeles; his commute is 45 miles each way, and he is not in a car or van pool. Tom has been thinking about looking for a job close to his home. However, he has been working for more than a year on a project that, if successfully completed, could lead to a major promotion at his current company. Unfortunately, there is a major defect in the product; this error has yet to be located and corrected. Tom must solve the problem in the very near future because the delivery date promised to potential customers is a month away.

Tom’s financial security is heavily dependent on this promotion because of rising costs at home. Both of the Adams children need braces for their teeth, Tom needs a new car (it broke down twice on the freeway this past fall), the house is in need of painting, and there is a water leak in the basement that he has not been able to repair.

Sarah, Tom’s wife, is a mechanical engineer. She has been considering getting a part-time job, but there are no engineering jobs available in the community. Full-time positions are available in northern Los Angeles, but accepting one would pose major problems with respect to chauffeuring and managing children. There are a few day-care centers in the community, but rumor has it they are very substandard. In addition, last year the Adams’s son Alex was accepted as a new student by the premier piano teacher in the area and there is no public transportation from their home to his studio. Melissa, the Adams’s daughter, is very sad at the thought of giving up her YMCA swimming team and her Girl Scout troop, both of which meet after school.

Carry out a K.T. appraisal for the Adams family’s predicament.

**Problem 2: Decision Analysis.** [20 points]

You need one more three-hour nontechnical course to fulfill your degree requirements. Upon reviewing the course offerings, and the time you have available, you note the following options:

Music 101:	Music Appreciation ( 2 hours)
Art 101:	Art Appreciation (3 hours)
History 201:	U.S History – Civil War to Present (3 hours)
Art 203:	Photography (3 hours)
Geology 101:	Introductory to Geology (3 hours)
Music 205:	Piano Performance ( 2 hours)

Music 101 requires that students spend a significant amount of time outside of class listening to classical music. The student reaction to the class has been mixed: Some students learned what to listen for in a symphony; others did not. The teacher for this class is knowledgeable but boring.

Art 101 has the students memorize the names of the great masters and learn how to recognize their works. . The lecturer is extremely boring, and you must go to class to see the slides of the great art works. While the course write-up looks good, it misses the mark in developing a real appreciation of art. Nevertheless, it is quite easy to get a relatively good course grade.

History 201 features an outstanding lecturer who makes history come alive. The instructor is a hard grader, however – C is certainly the median grade in this course. In addition, the outside reading and homework loads are enormous. While some students say the workload is equivalent to a five-hour course, most report that they learned a great deal from the course and plan to continue the interest in history they developed during this course.

Art 203 teaches the fundamentals of photography. Unfortunately, the equipment and film required for this course are quite expensive. Most of the time spent on the course occurs outside of class, while students are looking for artistic shots. The instructor is very demanding and bases his grade on artistic ability. Some students say that no matter how hard you work, if you don't develop a "photographic eye" you might not pass the course.

Geology 101has a moderately interesting lecturer and a normal level of homework assignments. Its two major out-of-town field trips will require you to miss a total of one week of class during the term. The average grade is B, but there is nothing conceptually difficult or memorable about the course.

Music 205 requires that you pass a tryout to be admitted to the class. While you will spend only one-half hour each week with your professor, many, many hours of practice are required. You must have significant talent to get a C or better.

Prepare a K.T. decision analysis table to decide which course to enroll in.

**Problem 3: Potential Problem Analysis.** [20 points]

Burgermeister has been serving fast-food hamburgers for more than 20 years. To keep pace with the changing times and tastes, Burgermeister has been experimenting with new products in an effort to attract new customers. Product development has recently designed a new Cajun-style chicken sandwich to be called Ragin' Cajun Chicken. The developers have spent almost nine months perfecting the recipe for this new product.

One of the developer got the idea for the new product in New Orleans during last year's Mardi Gras. Product development has suggested that the sandwich be placed on Burgermeister's menu immediately, so as to coincide with this year's Mardi Gras festivities. A majority of the time spent developing the Ragin' Cajun Chicken sandwich was dedicated to producing an acceptable sauce. Every recipe was tasted by the developers, who found early recipes for sauces to be too spicy. Finally, they agreed that the seventy-eighth recipe for the sauce was the best choice.

After reaching a consensus on the sauce, the development team focused on preparation aspects of the new sandwich. Several tests confirmed that the existing equipment in Burgermeister restaurants could not be used to prepare Ragin' Cajun Chicken. Instead, a new broiler would have to be installed in each of the 11,000 Burgermeister restaurants, at a cost of more than \$3000 per unit. The new broiler would keep the chicken moist while cooking it, as well as killing any Salmonella (harmful bacteria that are prevalent in chicken).

While testing the cooking techniques for the new broiler, one of the developers became very ill. A trip to the hospital showed that the developer had food poisoning from Salmonella. Test determined that the source of the bacteria was a set of tongs that the developer used to handle both the raw and the cooked chicken.

Next, the development team decided how the sandwich would be prepared. When the Ragin' Cajun Chicken sandwich was prepared using the same buns that are currently used for other Burgermeister sandwiches, the sandwich received a very low taste rating. After much experimentation, research determined that a Kaiser roll best complemented the new sandwich. Early cost estimates showed that Kaiser rolls would cost twice as much as the buns used currently for hamburgers, and stay fresh half as long as the hamburger buns.

You are an executive in charge of product development for Burgermeister. Based on the information above, perform a potential problem analysis, considering what could go wrong with the introduction of this new sandwich.

Your submission for this homework assignment must be made to [Canvas](#).

**This homework may optionally be done with a partner.**

Legibility counts.

All assignments must include the following pledge:

*“I have not received unauthorized aid on this assignment. I understand the answers that I have submitted. The answers submitted have not been directly copied from another source, but instead are written in my own words.”*