Tao offered some insight. "I don't have any magical ability," he said. "I look at a problem, and it looks something like one I've done before; I think maybe the idea that worked before will work here. Nothing's working out; then you think of a small trick that makes it a little better but still is not quite right. I play with the problem, and after a while, I figure out what's going on."

— *UCLA Newsroom*, by Stuart Wolpert, 2006.

MATH 1613 Trigonometry Sections 014
MWF 12:30PM - 1:20PM CLB 201

Instructor: Kazuo Yamazaki
  Office: Mathematical Science Building 443
  Email: kazuo.yamazaki@okstate.edu
  Online Classroom (D2L): http://oc.okstate.edu
Office hours:: Temporary Monday and Wednesday 1:30PM - 2:45PM.
  Feel free to drop by and see if I am available at any time.
Text: *Analytic Trigonometry with Applications* by R. Barnett *et al.*
Schedule: Roughly the entire book will be covered. Details are in the course schedule.
Exams: There will be three exams given during class on the following dates:
  (1) Friday September 21st
  (2) Friday October 26th
  (3) Friday November 30th
  (4) Comprehensive Exam: Tuesday December 11th 4:00PM - 5:50PM at MSCS 101
Prerequisites: Basic algebra and geometry, to be elaborated in class.
Quiz dates: Brief outline of the quiz dates and material:
  - Quiz 1: Background material (algebra, geometry, calculator use)
  - Quiz 2: Section 1.3: trigonometric ratios and right triangles
  - Quiz 3: Section 1.4: right triangle applications
  - Quiz 4: Section 2.3: trigonometric functions: unit circle approach
  - Quiz 5: Section 3.2: graphing $y = k + A\sin(Bx)$ and $y = k + A\cos(Bx)$
  - Quiz 6: Section 3.3: graphing $y = k + A\sin(Bx + C)$ and $y = k + A\cos(Bx + C)$
  - Quiz 7: Section 4.2: trigonometric identities
  - Quiz 8: Section 4.3: sum, difference and cofunction identities
  - Quiz 9: Section 5.1: inverse sine, cosine and tangent functions
  - Quiz 10: Section 5.3: trigonometric equations: an algebraic approach

- Quiz 11: Section 6.1, 6.2: law of sines and cosines
  Of these, 5 are in-class while six take-home.

Grading: Each of the three exams is worth 18 percent. The final exam is worth 25 percent. Quizzes add up to 21 percent. Finally attendance bonus points count up to 5 percent.

Calculators: The course requires at least one scientific calculator that can evaluate the trigonometric functions (sine, cosine, tangent) of angles expressed in degrees or in radians and evaluate the inverse trigonometric functions (arcsin or $\sin^{-1}$, etc.) The Mathematics Department has graphing calculators available for check out to students enrolled in mathematics courses. You will NOT be permitted to use any device that can establish a connection to a cellular or wireless network during in-class quizzes and exams. This means, for example, that you cannot use a cellphone calculator app or a tablet computer during quizzes/exams.

Attendance Policy: Class attendance is one of the strongest predictors of success (meaning a grade of C or better) in mathematics classes. Attendance will be taken every class period, beginning on Monday, August 27 and ending on Friday, November 30. If you miss no more than three class periods during this time then you will receive a 5% attendance bonus. This will be reduced by 1% for each absence beyond the third, to a minimum of 0% for eight or more absences. You must arrive on time and be present for the entire class period to be counted as present. Students with excused absences will be counted as present.

Missed Work: If you have to miss a class, quiz or an exam for a serious reason and you are able to provide acceptable documentation verifying that reason, then you will be allowed to make up the missed work. If you have a scheduled University activity (like a field trip), then you must warn me at least one week ahead of time and give me the documentation.