# INDS 99: HHMI Course in Data Analysis Kenyon College, Summer 2007

**Instructors:** (w/dept, office, phone, and e-mail)

Simon Garcia, Chemistry	Tomsich 108	427-5077	garcias@kenyon.edu
Bob Milnikel, Mathematics	Hayes 317	427-5905	milnikelr@kenyon.edu
Rob Onyenwoke, Biology	Higley 201	427-5743	onyenwoker@kenyon.edu
Paula Turner, Physics	Edelstein	427-5818	turnerp@kenyon.edu

#### Class schedule:

M-F, 8:30 – 11:30 AM: data analysis projects, discussion, tutorial activities, homework M-F, 12:45 – 2:15 PM: exercises, mini-lectures, practice problems, homework M-R, 7:00 – 8:30 PM: TAs available in Hayes 203

Each Friday, during either morning or afternoon session: a test on the week's material

### **Course Description**

This course trains students to understand and analyze data using a variety of entry-level tools and techniques appropriate to introductory courses in the natural and social sciences at Kenyon. Taught in an intensive, three-week format using interactive lecture techniques in the morning sessions, supported by workshop-style reinforcement and practice in the afternoon sessions, the course will hone students' ability to apply mathematical techniques including graphing, numerical modeling, regression analysis, and statistics to analyze and present data from a wide range of contexts.

## **Exam and Grading Information**

The grades assigned in this course will be determined using a weighted average of your percentage scores on the following assignments:

(20%) homework assignments

(20%) afternoon exercises/drills

(20%) exam 1 (Fri, July 6, probably afternoon)

(30%) exam 2 (Fri, July 13, morning or afternoon, as time allows)

(20%) exam 3 (Fri, July 20, morning)

## **Policy on Late Work and Absences**

**Homework:** Written solutions to homework assignments must be handed in at the *beginning of class each morning* for credit to be awarded. Once class has begun, it is too late to hand in your homework.

**Afternoon exercises/drills:** These must be done *before you leave the computer lab*. They are designed to be done in the workshop session, to reinforce the practical skills you need to have under your belt in order to advance to the more sophisticated questions on the homework assignments. So that you receive immediate feedback before you leave each session, you will mark corrections on each others' papers as the instructor goes over these exercises with you.

**Exams:** These exams are timed tests, *due within the assigned periods*. Because of the confidential nature of the exams and the compressed schedule of this course, no make-up exams will be scheduled.

**Absences:** While you will receive a letter grade for this course, in order to pass, you must complete all assignments thoroughly and on time and attend all class sessions. Unless we have granted you an extension in advance, we will penalize late work. Because our work will be intensive, if you skip class, you will fail this course; if you need to be absent, you must consult with one of us ahead of time, and we will be extremely reluctant to excuse any absences. (ref: Heidt & Garcia, ENGL 99 syllabus, Summer 2007)

#### **Academic Honesty Guidelines**

Everyone can learn from the ideas, interpretations, struggles, and even mistakes of one's classmates. In each segment of this course, you are expected to work together, explain things to each other, argue, even compare answers, **BUT** you must hand in only that work which reflects your own personal understanding of the assignment, or else you are plagiarizing. For example, if you are looking at a copy of someone else's work (another student's, the professor's, or a TA's) while you are writing your solution to any assignment, *that is plagiarism. Don't do it!* Keep working until you understand the material well enough to write your own explanations independently of such crutches. This policy applies to all assignments and exams in this course.

# **Disability Guidelines**

If you have a disability which may require classroom or test accommodations please see your instructor as soon as possible. If you have not already done so, you must register with the Coordinator of Disability Services (salvae@kenyon.edu, x5145), who is the individual responsible for coordinating accommodations and services for students with disabilities. All information and documentation of disability is strictly confidential. No accommodations will be granted in this course without notification from the Office of Disability Services.

#### Office Hours

Each instructor will inform you of his or her office hours for the week(s) in which they are involved in this course. Please be respectful of the differences in our schedules – we each have other responsibilities during this time, including work with summer science students, meetings, and various other duties – but we also want to engage with you as you work through this intensive course.