



Summer 2018 Honors Seminars

Seminars are restricted to students currently enrolled in the College Honors Program through College of Letters and Science, or students in the College of Creative Studies.

These **two-unit** courses provide an opportunity for research exploration in various disciplines and consider advanced studies beyond college. To earn honors credit, seminars must be completed with a **letter grade** of B or higher. **Eligible students may take 8 units maximum of INT 84 seminars and 8 units maximum of INT 184 seminars.**

Add Codes for enrollment are made available only by the professor of the course. Please contact them directly for add codes during your assigned pass time.

**All Honors Seminars are 2 units.
Consult GOLD for additional course details.**

Lower-Division Seminars:

*****INT 84ZK HAS BEEN CANCELLED*****

Session A

INT 84ZK: Introduction to Linear Programming: The Simplex Method

Professor Gustavo Ponce - Mathematics

Day: Mondays

Time: 0200-0450

Location: HSSB 3202

Enrollment Code: 17608

Operation Research (OR) was developed early in World War II, as there was a need to allocate scarce military operations in an efficient manner. After the war OR had a very rapid development, as linear programming, dynamic programming and inventory theory among others were developed at the end of the 1950's. Later, the computer revolution provided a great impulse to the growth of the OR. Large amounts of computations often required in the complex problems typically analyzed by OR could be easily handled. An example of a problem which can be solved by using linear programming is the Transportation Problem: A company has stocks of goods allocated in k different storehouses. The goods have to be delivered to n different customers, each of which is requesting a certain quantity of goods. The transportation cost of one unit of the good from the storehouse i (for $i=1$ to k) to the customer j (for $j=1$ to n) is known. The aim is to design a transportation strategy which satisfies the customers demand and minimize the total transportation costs. From the mathematical point of view this is an excellent subject to review and apply what we have learnt in linear algebra, geometry in the plane and three space, and multi-variable calculus.

A professor of mathematics at UCSB since 1991, Dr. Ponce has studied several aspects of nonlinear evolution models arising in mathematical physics. This area is at the intersection of partial differential equations and classical harmonic analysis. The emphasis has been on the development of new techniques which provide a better description for the behavior of the solutions to these models.

ponce@math.ucsb.edu

Upper-Division Seminars:

Session B

INT 184AB: Past and Future of the Human Genome

Professor Rolf Christoffersen – Molecular, Cellular, & Developmental Biology

Day: Mondays and Wednesdays
Time: 2:00-3:25 pm
Location: GIRV 1106

Enrollment Code: 08862

This seminar will consist of reading and discussion focused on Siddhartha Mukherjee's book titled "The Gene: An Intimate History". This book is written for a general audience and tells the story of how we learned to read the DNA code, how we might rewrite that code in the future, and what the implications are for humanity when we have the ability to direct our own evolutionary future. Interested students from all majors are welcome.

Dr. Christoffersen earned his Ph.D. at UCLA followed by postdoctoral training at McGill University and the University of California. He joined the UCSB faculty in 1985. His research focuses on the molecular biology and biochemistry of plants. He has taught genetics since his arrival at UCSB and is currently Co-Director of a major research project funded by the Howard Hughes Medical Institute on improving biological science instruction at UCSB.

christof@lifesci.ucsb.edu

Session A

INT 184AM: Resources and Conflict in Africa

Professor Mhoze Chikowero, History

Day: Mondays & Wednesdays
Time: 9:30-10:55 am
Location: ELLSN 2816

Enrollment Code: 16659

Why is Africa conflict-ridden? Conflict over resources heightened since the Berlin Conference (1884/85), marking the onset of extractive colonialism and neocolonialism. This seminar explores connections between the European industrial revolution and the contemporary high-tech economies with resource-driven genocides and plunders, and the struggles for resource sovereignty in Africa.

Professor Chikowero is an expert in African History. He is the author of award-winning book, *African Music, Power and Being in Colonial Zimbabwe*. He is Director of Research for the Mbira Institute, a think tank dedicated to researching the effects of colonial trauma and the harnessing of African intellectual capital for African development.

chikowero@history.ucsb.edu