BIOL 4310L: Cytogenetics Practicum

5-7 Credit Hours

Prerequisite: A grade of "B" or better in BIOL 4300K, a grade "C" or better in BIOL 3327, and approval by the director of the KSU Cytogenetic Technology Program

This course is a supervised, credit-earning work experience of two academic semesters in a clinical cytogenetics laboratory affiliated with either a university hospital or a company. The extensive clinical laboratory training includes routine cytogenetic techniques such as G-banding, as well as advanced techniques such as fluorescent in situ hybridization (FISH) and array CGH (Comparative Genomic Hybridization). Upon the completion of the internship, the student is eligible to sit for the ASCP BOR (American Society for Clinical Pathology Board of Registry) certification exam.

BIOL 4322: Plant Systematics

4 Credit Hours

Prerequisite: BIOL 1108 and BIOL 1108L)

This course explores the evolutionary relationships of land plants and how those relationships relate to modern and historic classification systems. Students learn the major orders and families of flowering plants along with the skills to identify plants to genus and species in the field and from preserved specimens. The course has a major lab and field component, and students are expected to attend two weekend field trips.

BIOL 4333: WIKIed Biology

3 Credit Hours

Prerequisite: BIOL 1108 and BIOL 1108L

In this course students use the internet as a dynamic, participatory and collaborative medium to create new, scientifically valid, web based syntheses of biological concepts that may be used to disseminate information on the World Wide Web. Through this process, students learn to judge web sites, acquire a deeper understanding of biological concepts, develop skills of self-monitoring and reflection, and become more proficient in current advances in technology and communication