

BIOL 5101(R Seminar)

Spring 2013

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Office Hours: Mondays 12-1 and 3-5 LS124

Time and Place of Class Meetings: Mondays 10-10:50 (ERB470)

Course Content and Learning Outcomes: This course is an introduction to R. The course is geared toward the student with a biology background and limited programming experience. The course provides an entrance to programming and scripting in the R language.

Prerequisite: Undergraduate degree in biology (or consent of instructor)

Course Format: Short lecture followed by hands on computer lab work.

Textbook: None

Software: You will need access to a computer capable of running R and RStudio this can be a linux, mac or windows system.

Websites: <http://www.uta.edu/karyodb/rseminar/>

Descriptions of examinations and major assignments:

Class participation (50% of grade)

Project (50% of grade) - mutually agreed upon research projects.

Projected List of Course Topics:

1. Navigating in R & R Studio
2. Basics of R syntax
3. Data and control structures in R
4. Reading and writing data
5. Plotting Data
6. Generating Data
7. Linear models
8. Generalized linear models
9. Model selection
10. Phylogenetic comparative methods
11. Writing functions

Important University Policies:

Drop Policy: If you decide to drop this course (or any other, for that matter) you must obtain a drop slip from the departmental undergraduate advisor's office fill it out, have the instructor of the course you wish to drop sign the slip and return it to the advisor's office. If you simply stop attending class without first completing and returning to the undergraduate advisor a drop slip you remain enrolled in the class and will receive a grade of F. Please refer to deadlines listed in the academic calendar.

Americans With Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the

same opportunities enjoyed by all citizens. As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

Academic Integrity: It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

Student Support Services Available: The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

Drop for non-payment of tuition: Payment must be received by the term due date (see academic calendar for current semester) or your registration will be cancelled. If your registration is cancelled for non-payment, you may re-register for classes but only if seats are available.

Bomb Threats: If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats. Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.

MavMail: The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email. All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. **Students are responsible for checking their email regularly.**