## INSECT BIOLOGY
BIOL 4331 Fall 2022

T Thu 9:30-10:50, BRB 1025
Dr. Jon Seal
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(903) 566-7126

**OFFICE HOURS:** BEP 264. TTh 11-12pm or by appointment; try to find me before or after class.

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
<th>Reading</th>
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<tbody>
<tr>
<td>August 22</td>
<td><strong>Unit I: Organismal Biology of Insects</strong></td>
<td>Chap. 1</td>
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<tr>
<td>Sept 5</td>
<td>Introduction (what is an insect?)</td>
<td>Chap. 1</td>
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<td>Sept 6</td>
<td><strong>Labor Day, University Closed</strong></td>
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<tr>
<td>Sept 13</td>
<td>External Anatomy</td>
<td>Chap. 2</td>
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<td>Sept 20</td>
<td>Internal Anatomy and Function</td>
<td>Chap. 3</td>
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<td>Sept 27</td>
<td>Sensory Systems</td>
<td>Chap. 4</td>
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<td>Sept 29</td>
<td>Reproduction and Development</td>
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<td>Sept 30</td>
<td>Exam 1</td>
<td>TBA</td>
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<td><strong>Unit II: Life history and evolution of Insects</strong></td>
<td>Chap. 5-6</td>
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<td>Oct 4</td>
<td>Life Histories</td>
<td>Chap. 7-8</td>
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<tr>
<td>Oct 11-13</td>
<td>More evolution</td>
<td>Chap. 12</td>
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<td>Oct 20</td>
<td>Insect Societies</td>
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<td>Oct 25</td>
<td>Exam II</td>
<td>TBA</td>
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<tr>
<td>Oct 27</td>
<td><strong>Literature Assignment #2 Due</strong></td>
<td>TBA</td>
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<tr>
<td>Nov 4</td>
<td>Last day to withdraw (with W grade)</td>
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<tr>
<td>Nov 8 – 18</td>
<td><strong>Unit III: Ecology of Insects, Applied Entomology</strong></td>
<td>Chap 9-11, 13-14, 15-17</td>
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<td></td>
<td>Insect Ecology (plant-insect-fungal interactions, interactions with abiotic world, predation, parasitism, and so on) and Biomedical and Conservation Entomology</td>
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<td>Nov 21 – 25</td>
<td>Thanksgiving, University Closed</td>
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<td>Nov 28</td>
<td><strong>Literature Assignment #3 Due</strong></td>
<td>TBA</td>
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<td>Dec. 1</td>
<td>Exam III</td>
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**FINAL EXAM:** TBD

**Please Note:** the schedule described above is tentative.

**COURSE DESCRIPTION:** The objectives of this course are to enable students to learn about all aspects of insect biology (organismal biology, evolution and ecology).

EVALUATION: Grades will be assigned based on the performance on three exams, a final exam and three literature assignments. The literature assignment will focus on an assigned reading from the primary literature. The assignments will involve questions about the reading. Students will have at least one week to complete the assignments. Due dates are on the syllabus. Exams and the literature assignment will be worth 100 points each and the literature assignment will collectively comprise 100 points (first and second assignments 33 points and 34 on the third for 100 points total). You must complete the assignments by the date stated however. The completed literature assignments will be uploaded on Canvas by the deadline announced in class. Assignments not uploaded by the deadline will result in 0 points. Emailed assignments are not accepted. Plan ahead. **Do not wait until 5 minutes before the deadline to submit your assignments.** Additional details will be announced in class.

GRADING: 60% exams (3 at 20% each), 20% Literature Assignment, 20% final exam. In grading, I strive for fairness and consistency. If you feel like a grading error was made on an exam, you may submit a typed appeal within a week (7 days) of when the exam was returned to you. Your written appeal should be based on course materials and should stress the scientific validity of your original response.

Final grades in the course will be determined by a standard grading system

90 – 100% = A 80 – 89% = B 70 – 79% = C 60 – 69% = D < 59% = F

Although exams will stress the material preceding each exam, all exams should be considered comprehensive (as is all biology). Exams will cover the materials presented in lectures and assigned readings. Since this is an upper level course and students should have a grasp of basic biology, genetics and ecology, most of the exams will have a short answer format and contain some longer essay type questions. You must answer the questions clearly using complete sentences. This is not meant to torture you, but the ability to communicate effectively and remember content across courses are very important skills. Thus the clarity of your written answer will be a factor in grading.

SUPPLEMENTS: Illustrations, announcements and PowerPoint presentations will be available on Canvas. These materials are strictly for your own use, and are not to be disseminated to anyone else, under any circumstances. I also suggest printing out illustrations for future lectures to facilitate note-taking.

PRE REQUISITES: General Biology (BIOL 1306, 1307), Genetics (BIOL 3332), Ecology (BIOL 3336) and Cell Biology (BIOL 3334)

HONOR CODE/ ACADEMIC INTEGRITY: Students should be aware that absolute academic integrity is expected of every student in all undertakings at The University of Texas at Tyler. Failure to comply can result in strong university-imposed penalties. Plagiarism (copying the work of others without proper citation), talking during test time, having mobile electronic devices on (cell phones, PDA’s, laptops) during exams are some examples of behavior to be avoided.
Be forewarned that while taking an exam, the possession of anything containing course content will be considered cheating, whether or not you actually refer to it during the exam. TALKING during an EXAM to anyone other than the instructor or proctor will automatically be considered cheating. It does not matter what you were talking about. This includes the use of cell phones (even if they call YOU) or any other electronic device that could be used to record test material. Violation of this policy will be considered cheating and treated accordingly. Penalties for cheating include anything from a zero on the exam or quiz during which the cheating occurred, up to an F for the course in question.

You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give and receive “consulting” help. However, this permission to cooperate should never involve one student having possession of a copy of all or part of work done by someone else, in the form of digital or hard copy. If copying occurs, both the student who copied the work from another student and the student who gave material to be copied will both automatically receive a zero for the assignment. Penalty for violation of this Code can also be extended to include failure of the course and University disciplinary action.

EXAMS: It is your responsibility to arrive at the exam on time. All exams will be held in our regular classroom. Students who arrive late will not be given additional time, and anyone arriving after other students have finished and left will not be permitted to take the exam.

Failing to take a scheduled examination will result in a score of 0 unless replaced by a make-up exam in a timely fashion. ‘Make-up’ examinations are given only in cases where there is a documented excuse beyond your reasonable control:

- Illness – you must have a physician note indicating that you were not in a physical condition to take the exam at the scheduled time. A note from a family member is insufficient.
- Death or grave illness in your immediate family.
- Significant scheduling conflicts (e.g., med-school interviews, or other university sponsored events). You must notify the instructor at least 2 weeks in advance of this absence.

The nature of the make-up exam will be decided by the instructor and may consist of a written and/or oral examination.

Realize that essay questions are not ‘open ended questions’ or opinion-based. The questions I ask you will have definite, correct answers and will not involve your opinions unless I explicitly ask you for your opinions. Also realize that if you write a very long answer, but do not answer the question and/or provide factually incorrect statements, you may lose points. Do not expect to receive points for effort. Contradictory information in an answer will also result in a loss of points. Students must answer the questions clearly using complete sentences, not bullets or phrases. This is not meant to torture students, but the ability to communicate effectively and remember content across lectures are very important skills.

All exams or assignments completed on Canvas will be checked for plagiarism within the class and with a database of assignments and other sources from around the world. Do not cheat or plagiarize. **If you cheat or plagiarize, you will at a minimum receive a 0 on that assignment and be reported to the university authorities.** Realize that any issue with academic misconduct can severely impact, if not inhibit, your chances of obtaining a career associated with public trust (police officer, lawyer, doctor, dentist, nurse, etc.). Don’t cheat or plagiarize. Just don’t do it. Don’t be tempted to look up/copying and pasting sources while taking an exam. Just don’t. For definition and explanation of cheating or plagiarism see section on “Student Standards of Academic Conduct” toward the end of this document.
UNIVERSITY POLICIES

UT Tyler Honor Code
Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

Students Rights and Responsibilities
To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: http://www.uttyler.edu/wellness/rightsresponsibilities.php

Important Covid-19 Information for Classrooms and Laboratories
It is important to take the necessary precautions to ensure a healthy and successful year. UT Tyler continues to urge you to protect yourselves against the flu, COVID and any new threats that may be developing. Be diligent about preventive measures such as washing hands, covering sneezes/coughs, social distancing and vaccinations, which have proven to be successful in slowing the spread of viruses. Encourage those who don’t feel well to stay home, and if they show symptoms, ask them to get tested for the flu or COVID. Self-isolation is important to reduce exposure (CDC quarantine/isolation guidelines). Please work with your faculty members to maintain coursework and please consult existing campus resources for support.

Recording of Class Sessions
Class sessions may be recorded by the instructor for use by students enrolled in this course. Recordings that contain personally identifiable information or other information subject to FERPA shall not be shared with individuals not enrolled in this course unless appropriate consent is obtained from all relevant students. Class recordings are reserved only for the use of students enrolled in the course and only for educational purposes. Course recordings should not be shared outside of the course in any form without express permission.

Campus Carry
We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. Please be aware that many research and teaching laboratories in the Department of Biology are approved Exclusion Zones. Be alert to signage throughout the HPR and BEP buildings. More information is available at http://www.uttyler.edu/about/campus-carry/index.php

UT Tyler a Tobacco-Free University
All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.

Grade Replacement/Forgiveness and Census Date Policies
Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. (For Fall, the Census Date is Sept. 12.)
Grade Replacement Contracts are available in the Enrollment Services Center or at http://www.uttler.edu/registrar. Each semester’s Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date (Sept. 4th) is the deadline for many forms and enrollment actions of which students need to be aware. These include:
- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a “W” grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

State-Mandated Course Drop Policy
Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).
Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

Disability Services
In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, including non-visible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criteria applies to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079.

Student Absence due to Religious Observance
Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

Student Absence for University-Sponsored Events and Activities
If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

**Social Security and FERPA Statement:**
It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

**Emergency Exits and Evacuation:**
Everyone is required to exit the building when a fire alarm goes off. Follow your instructor’s directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

**Student Standards of Academic Conduct:** Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but 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.

(i) “Cheating” includes, but is not limited to:
- copying from another student’s test paper;
- using, during a test, materials not authorized by the person giving the test;
- failure to comply with instructions given by the person administering the test;
- possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed “crib notes”. The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;
- using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;
- collaborating with or seeking aid from another student during a test or other assignment without authority;
- discussing the contents of an examination with another student who will take the examination;
- divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student;
- substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;
- paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;
- falsifying research data, laboratory reports, and/or other academic work offered for credit;
• taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and
• misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.

(ii) “Plagiarism” includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another’s work and the submission of it as one’s own academic work offered for credit.

(iii) “Collusion” includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.

(iv) All written work that is submitted will be subject to review by SafeAssign™, available on Blackboard.

**UT Tyler Resources for Students:**

- UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu, http://www.uttyler.edu/writingcenter/
- UT Tyler Tutoring Center (903.565.5964), tutoring@uttyler.edu, https://www.uttyler.edu/tutoring/
- The Mathematics Learning Center, RBN 4021, This is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.
- UT Tyler Counseling Center (903.566.7254) https://www.uttyler.edu/counseling/