Biology 4198 (#11255): Special Problems (3 units)  

Instructor: Dr. Renato Aguilera  
Office hours: By appointment  
Office location: Biosciences 4.144  
Phone: (915) 747-6852  
Email: raguilera@utep.edu

Text: None.

Prerequisites: Instructor approval; laboratory fee required.

Objective: This is a laboratory research course, designed to provide students with hands-on experience in research and increase their familiarity with laboratory methods and processes. The knowledge gained in this course will provide a background for students interested in pursuing careers in biology, biotechnology, research, health/medicine or the allied health professions. Students will participate in research projects in faculty mentor’s laboratory, interact with other students, staff and faculty, attend lab meetings, and may be asked to present their data and/or published papers from the primary research literature. Research projects will be in the areas of immunology, cellular and developmental biology, and molecular biology.

It is expected that students will dedicate 5-9 hours per week to the completion of this course and its requirements.

Specific research projects and responsibilities will be assigned at the beginning of the semester for each student.

This course may be used as upper division elective units; however, no more than 6 hours of 4198-4298-4398 may be counted as upper division elective units toward graduation.

Exams: None.

Grading: Letter grades for this course will be determined based primarily on student attendance and performance, and will be assigned as follows:

- 90-100% A
- 80-89% B
- 70-79% C
- 60-69% D
- 59% or less F

Drop date: To receive an automatic “W”, the last day to drop or withdraw from this class is October 30th. After this date, a “W” can only be assigned by the Dean of the College of Science, and is only granted under exceptional circumstances.
Biology 4198 (#11239): Special Problems (1 unit)  BRB 4.216

Instructor:  Dr. Renato Aguilera
Office hours:  By appointment
Office location:  Biosciences 4.144
Phone:  (915) 747-6852
Email:  raguilera@utep.edu

Text:  None.

Prerequisites:  Instructor approval; laboratory fee required.

Objective:  This is a laboratory research course, designed to provide students with hands-on experience in research and increase their familiarity with laboratory methods and processes. The knowledge gained in this course will provide a background for students interested in pursuing careers in biology, biotechnology, research, health/medicine or the allied health professions. Students will participate in research projects in faculty mentor’s laboratory, interact with other students, staff and faculty, attend lab meetings, and may be asked to present their data and/or published papers from the primary research literature. Research projects will be in the areas of immunology, cellular and developmental biology, and molecular biology.

It is expected that students will dedicate 3-5 hours per week to the completion of this course and its requirements.

Specific research projects and responsibilities will be assigned at the beginning of the semester for each student.

This course may be used as upper division elective units; however, no more than 6 hours of 4198-4298-4398 may be counted as upper division elective units toward graduation.

Exams:  None.

Grading:  Letter grades for this course will be determined based primarily on student attendance and performance, and will be assigned as follows:

- 90-100%  A
- 80-89%  B
- 70-79%  C
- 60-69%  D
- 59% or less  F

Drop date:  To receive an automatic “W”, the last day to drop or withdraw from this class is October 30th. After this date, a “W” can only be assigned by the Dean of the College of Science, and is only granted under exceptional circumstances.
Biology 4198 (#11246): Special Problems (1 unit) BRB 4.216

Instructor: Dr. Renato Aguilera
Office hours: By appointment
Office location: Biosciences 4.144
Phone: (915) 747-6852
Email: raguilera@utep.edu

Text: None.

Prerequisites: Instructor approval; laboratory fee required.

Objective: This is a laboratory research course, designed to provide students with hands-on experience in research and increase their familiarity with laboratory methods and processes. The knowledge gained in this course will provide a background for students interested in pursuing careers in biology, biotechnology, research, health/medicine or the allied health professions. Students will participate in research projects in faculty mentor’s laboratory, interact with other students, staff and faculty, attend lab meetings, and may be asked to present their data and/or published papers from the primary research literature. Research projects will be in the areas of immunology, cellular and developmental biology, and molecular biology.

It is expected that students will dedicate 3-5 hours per week to the completion of this course and its requirements.

Specific research projects and responsibilities will be assigned at the beginning of the semester for each student.

This course may be used as upper division elective units; however, no more than 6 hours of 4198-4298-4398 may be counted as upper division elective units toward graduation.

Exams: None.

Grading: Letter grades for this course will be determined based primarily on student attendance and performance, and will be assigned as follows:

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Drop date: To receive an automatic “W”, the last day to drop or withdraw from this class is **October 30th**. After this date, a “W” can only be assigned by the Dean of the College of Science, and is only granted under exceptional circumstances.
Biology 5302 (#11349): Research in the Biological Sciences (3 units)  BRB 4.216

Instructor:  Dr. Renato Aguilera  
Office hours: By appointment  
Office location: Biosciences 4.144  
Phone: (915) 747-6852  
Email: raguilera@utep.edu

Text: None.

Prerequisites: Instructor approval; laboratory fee required.

Objective: This is a 3-unit research course for graduate students in the Master of Science program, emphasizing research, writing and discussion. Students will perform research on identified projects in the faculty mentor’s laboratory, and will learn to generate, analyze and present their data in preparation for the M.S. degree. Research projects will be in the areas of immunology, cellular and developmental biology, and molecular biology. Additional responsibilities may include, but are not limited to: 1) writing a thesis proposal; 2) attending lab meetings and seminars; 3) meeting with members of the student’s committee; 4) presenting data at research symposia and scientific meetings; 5) participating in experimental design and performance; and 6) discussing results and comparing them with those from the literature.

It is expected that students will dedicate a minimum of 10 hours per week to the completion of this course and its requirements.

Specific research projects and responsibilities will be assigned at the beginning of the semester for each student.

This course may be repeated, but no more than 6 hours of credit will count toward the degree.

Exams: None.

Grading: Letter grades for this course will be determined based primarily on student attendance and performance, and will be assigned as follows:

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Drop date: To receive an automatic “W”, the last day to drop or withdraw from this class is October 30th. After this date, a “W” can only be assigned by the Dean of the College of Science, and is only granted under exceptional circumstances.
Instructor: Dr. Renato Aguilera  
Office hours: By appointment  
Office location: Biosciences 4.144  
Phone: (915) 747-6852  
Email: raguilera@utep.edu

Text: None.

Prerequisites: Instructor approval.

Objective: This is a 3-unit research course, to be taken by graduate students in the Master of Science program as they begin the initial work on their M.S. thesis. Research projects will be in the areas of immunology, cellular and developmental biology, and molecular biology. Additional responsibilities may include, but are not limited to: 1) writing and defending the thesis proposal; 2) attending lab meetings and seminars; 3) meeting with members of the student’s committee; 4) presenting data at research symposia and scientific meetings; 5) participating in experimental design and performance; and 6) discussing results and comparing them with those from the literature.

It is expected that students will dedicate a minimum of 10 hours per week to the completion of this course and its requirements.

Specific research projects and responsibilities will be assigned at the beginning of the semester for each student.

Exams: None.

Grading: Letter grades for this course will be determined based primarily on student attendance and performance, and will be assigned as follows:

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Drop date: To receive an automatic “W”, the last day to drop or withdraw from this class is October 30th. After this date, a “W” can only be assigned by the Dean of the College of Science, and is only granted under exceptional circumstances.
Biology 6310 (11627): Adv. Research Techniques (3 units) BRB 4.216

Instructor: Dr. Renato Aguilera
Office hours: By appointment
Office location: Biosciences 4.144
Phone: (915) 747-6852
Email: raguilera@utep.edu

Text: None.

Prerequisites: Instructor approval; laboratory fee required.

Objective: This is a 3-unit research course for graduate students in the Ph.D. program. Students will perform (lab rotations) research in two faculty mentor’s laboratories during two semesters. After each of these rotations, the trainees will generate, analyze and present their data and prepare a written rotation report to be graded by the instructor. Research projects will vary by rotation mentor.

It is expected that students will dedicate a minimum of 10 hours per week to the completion of this course and its requirements.

Specific research projects and responsibilities will be assigned at the beginning of the semester for each student.

Exams: None.

Grading: Letter grades for this course will be determined based primarily on student attendance and performance, and will be assigned as follows:

90-100%       A
80-89%         B
70-79%         C
60-69%         D
59% or less    F

Drop date: To receive an automatic “W”, the last day to drop or withdraw from this class is October 30th. After this date, a “W” can only be assigned by the Dean of the College of Science, and is only granted under exceptional circumstances.
Biology 6390 (#11442): Independent Research (3 units)  BRB 4.216

Instructor: Dr. Renato Aguilera
Office hours: By appointment
Office location: Biosciences 4.144
Phone: (915) 747-6852
Email: raguilera@utep.edu

Text: None.

Prerequisites: Instructor approval.

Objective: This is a 3-unit research course for graduate students in the Doctor of Philosophy program. Students will perform research in the faculty mentor’s laboratory, and will generate, analyze and present their data in preparation for the Ph.D. degree. Research projects will be in the areas of immunology, cellular and developmental biology, and molecular biology. Doctoral students are required to attend departmental seminars, graduate student seminars, and student proposal and thesis or dissertation defense presentations. Additional responsibilities may include, but are not limited to: 1) writing the dissertation proposal; 2) participating in the preparation of manuscripts and grant applications; 3) attending lab meetings; 4) meeting with members of the student’s committee; 5) presenting data at research symposia and scientific meetings; 6) participating in experimental design and performance; 7) discussing results and comparing them with those from the literature; and 8) mentoring junior lab members.

It is expected that students will dedicate a minimum of 10 hours per week to the completion of this course and its requirements.

Specific research projects and responsibilities will be assigned at the beginning of the semester for each student.

Exams: None.

Grading: Letter grades for this course will be determined based primarily on student attendance and performance, and will be assigned as follows:

- 90-100% A
- 80-89% B
- 70-79% C
- 60-69% D
- 59% or less F

Drop date: To receive an automatic “W”, the last day to drop or withdraw from this class is October 30th. After this date, a “W” can only be assigned by the Dean of the College of Science, and is only granted under exceptional circumstances.
Instructor: Dr. Renato Aguilera
Office hours: By appointment
Office location: Biosciences 4.144
Phone: (915) 747-6852
Email: raguilera@utep.edu

Text: AIDS-Science and Society

Prerequisites: Instructor approval.

The main goal of this Freshman course is to encourage and engage science-oriented students in critical thinking concerning one of the most important issues affecting our society. Understanding the deadly outbreak of the AIDS disease and its causative agent, the HIV virus, is of immediate importance for survival in this new century. The class will focus on the basic biology of the disease and its societal impacts. Apart from these issues, students will learn how to access and process information from the library and the internet. Students will also gain valuable study and presentation skills along with time management skills and general survival strategies.

Exams: Two midterms and a final exam.

Grading: Letter grades for this course will be determined based primarily on student attendance and performance, and will be assigned as follows:

- 90-100% A
- 80-89% B
- 70-79% C
- 60-69% D
- 59% or less F

Drop date: To receive an automatic “W”, the last day to drop or withdraw from this class is October 30th. After this date, a “W” can only be assigned by the Dean of the College of Science, and is only granted under exceptional circumstances.