Course: Research Experience in Biology (BIOL 477) – Dr. Porras-Alfaro
Semester: Fall 2011
Location: Fungal Molecular Ecology Laboratory (Waggoner Hall 273)
Office hours: T and Th 12-1:30 pm, W 1-2 pm (or by appointment only).

Time: arranged
Credit: 1-12 hours; only 3 hours can be applied to Biology Major (2-3 hrs recommended per semester).
Prerequisites: BOT 200, MICRO 200, & ZOO 200 (Intro sequence), sophomore standing (≥30 credit hours), and
PERMISSION OF THE INSTRUCTOR

INSTRUCTOR CONTACT INFORMATION:
Andrea Porras-Alfaro, Ph.D.
Assistant Professor-Biology
Office: Waggoner Hall 287
Lab: Waggoner Hall 273
Phone number: (309) 298 1267
E-mail: a-porras-alfaro AT wiu.edu
Website: http://faculty.wiu.edu/a-porras-alfaro

Students with disabilities
“In accordance with University policy and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. For the instructor to provide the proper accommodation(s) you must obtain documentation of the need for an accommodation through Disability Resource Center (DRC) and provide it to the instructor. It is imperative that you take the initiative to bring such needs to the instructor’s attention, as he/she is not legally permitted to inquire about such particular needs of students. Students who may require special assistance in emergency evacuations (i.e. fire, tornado, etc.) should contact the instructor as to the most appropriate procedures to follow in such an emergency. Contact Disability Resource Center (DRC) at 298-2512 for additional services.”

Objective: The purpose of this course is to help the student acquire basic research skills such as: writing, designing and conducting experiments, preparation of posters and proposals, presentations in scientific meetings, etc. This class will focus in the development of organizational skills, attention to detail, development of new skills in molecular biology, culture, greenhouse, etc (all depending of the nature of the project and academic level and previous laboratory experience of each student). Particular tasks required in this course will include data collection, data entry, data analysis, report writing, and poster/talk presentations. Students are expected to read material outside of their laboratory time, prepare presentations for laboratory meetings and learn to collaborate with other laboratory members.

Particular projects and duties will vary by semester and student, and must be discussed with Dr. Porras-Alfaro before registration. Project will be decided at the beginning of the semester.

Evaluation: Dr. Porras-Alfaro expects at least 3 hours of laboratory/field/computational work per week for each hour of credit earned (2 credits = 6hrs/week; 3 credits = 9hrs/week). Students will present a poster in undergraduate research day and write a short undergraduate research proposal. Student must attend laboratory meetings and department seminars on Fridays or when requested by Dr. Porras-Alfaro. Participation on outreach activities organized by the laboratory as a group is also expected.
Grades:

- 30 points: Data collection (keep scientific notebook with research conducted every week, pages must be numbered and all experiments should have date, objective, procedure and notes of main results). Backup files and notebook will be maintained in the laboratory. The student is welcome to make photocopies of its scientific records and take backups of the files home.
- 30 points: Undergraduate Research Day Poster. Details will be discussed with each student individually
- 20 points: Undergraduate Research Proposal: student will write a short proposal to support their research following undergraduate grant guidelines at WIU.
- 20 points: Participation in laboratory meetings, seminar attendance, lab duties (including cleaning its own glassware, cleaning and autoclaving any materials during and at the end of the semester, etc), reading scientific articles, outreach activities, etc

Grading Scale:

*Undergraduate students:*

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<thead>
<tr>
<th>Grade</th>
<th>100 Points</th>
<th>C+</th>
<th>77-79</th>
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<tbody>
<tr>
<td>A</td>
<td>93-100</td>
<td>C</td>
<td>73-76</td>
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<tr>
<td>A-</td>
<td>90-92</td>
<td>C-</td>
<td>70-72</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
<td>D+</td>
<td>67-69</td>
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<tr>
<td>B</td>
<td>83-86</td>
<td>D</td>
<td>63-66</td>
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<tr>
<td>B-</td>
<td>80-82</td>
<td>D-</td>
<td>60-62</td>
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<td>&gt; 60</td>
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- **Deadlines:** It is your responsibility to turn in your project proposals, reports, drafts of posters or presentations on time. You will lose 50% for each day you are late (due date will be arranged with each student). Do not wait until the last minute. If you have questions come to office hours, make an appointment. This class requires a lot of time discussion with instructor. You need to be proactive and make appointments with the instructor (it is expected that you will meet with the instructor at least once every two weeks).
- It is your responsibility to come to the laboratory and finish your responsibilities.
- Attendance to the laboratory is required and expected, if for some reason you need to make changes in your schedule, please notify Dr. Porras-Alfaro to make other arrangements.
- Ask questions to Dr. Porras-Alfaro or any other members of the lab. You will have a graduate student mentor assign to you in case Dr. Porras-Alfaro is not available at a specific time or traveling. The laboratory technician is also available to help you with question or training.
- Clean after you finish. You will lose 50% of the points from your grade if your lab space, equipment, etc are constantly dirty and disorganized.
- Academic dishonesty is not tolerated at WIU. You will lose all the points of this class if you commit plagiarism in your data or writing assignments.

**GENERAL GUIDELINES**

**University Policies:**
It is the student’s responsibility to be familiar with the information (including required forms, definitions, and time lines) contained in the following university web sites. Each student should access these web sites and carefully read the information they contain, your instructors will hold you responsible for knowing this information. If you have questions about any of the information contained in the web sites, ask your instructor:

Students Rights and Responsibilities:  [http://www.wiu.edu/provost/student/](http://www.wiu.edu/provost/student/)
Grade Appeal Policy:  [http://www.wiu.edu/policies/gradeapp.shtml](http://www.wiu.edu/policies/gradeapp.shtml)
WesternOnline (need ECOM username and password for entry):  [http://WesternOnline.wiu.edu](http://WesternOnline.wiu.edu)

**Department of Biological Sciences**

**Student Rights and Responsibilities**

This information was printed out from the Biological Sciences Department Website ([http://www.wiu.edu/biology/student/policies.php](http://www.wiu.edu/biology/student/policies.php)). As part of this class it is your responsibility to become familiar with this information.

“Students at Western Illinois University have specific rights and responsibilities. These include such topics as grade appeals, academic integrity, and other important issues. If you are a student at WIU, you should be familiar with them. They can be read at the following website: [http://www.wiu.edu/provost/students/](http://www.wiu.edu/provost/students/)”

**Grade Appeals Policy:** “The official grade appeals policy of Western Illinois University is that students should contact the faculty member involved no later than two weeks after the start of the next semester (the semester after the one the class that is being appealed was in). There are specific protocols which must be followed. If you have a grade appeal read the website below: [http://www.wiu.edu/policies/gradeapp.php](http://www.wiu.edu/policies/gradeapp.php)”

**Final Exams:** This class does not have a final exam. You are required to meet with the instructor in the finals exam week to discuss final details of your project, turn in your assignments, files and notebooks and discuss final details of your project.

**Definition of Plagiarism:** “The faculty of the Department of Biological Sciences define plagiarism as expressed by V. E. McMillan in Writing Papers in the Biological Sciences (Bedford/St.Martin's Press, New York, pg 16)

"Plagiarism is the theft of someone else's words, work, or ideas. It includes such acts as (1) turning in a friend's paper and saying it is yours; (2) using another person's data or ideas without acknowledgement; (3) copying an author's exact words and putting them in your paper without quotation marks; and (4) using wording that is very similar to that of the original source but passing it off as entirely your own even while acknowledging the source."

“This includes information in textbooks or laboratory manuals, honors and masters theses, all writing assignments, and images. The faculty of the Department attempt to monitor student writing assignments (essay exams, papers, laboratory reports, and other writing assignments or exercises) for incidence of plagiarism. If plagiarism is found, the faculty will discuss the situation with the student and indicate to the student the penalty for this academic dishonesty. Potential penalties include those cited in the academic dishonesty section of the WIU academic integrity web page: [http://www.wiu.edu/policies/acintegrity.php](http://www.wiu.edu/policies/acintegrity.php)”

**Academic Dishonesty**

“Dishonest behavior is not appropriate and is not permitted at Western Illinois University. If a faculty member suspects that a student has cheated, falsified documents, copied someone else's materials without acknowledging them, or other issues, there are specific protocols that should be followed. They are described in: [http://www.wiu.edu/policies/acintegrity.php](http://www.wiu.edu/policies/acintegrity.php)

**Syllabus Agreement Form:** Now that you have read the syllabus, make sure to get any questions you might have regarding its contents answered, and finally sign the syllabus agreement form (on your instructor desk). This form should be signed by the beginning of the third lab or you will not be allowed to participate in the lab.