



BIOLOGY UNDERGRADUATE NEWSLETTER

Newsletter 1



23 August 2010



Hello,

This is the first in what I plan to be a number of regularly occurring email-newsletters. I intend for these newsletters to be monthly. They will contain announcements, job and research postings, scholarship and financial aid opportunities, and other information that should help you over the course of the semester.

First of all, I wish to welcome you back to UCF, or to UCF for the first time, for the Fall 2010 semester. I hope that you had a nice break and are ready to meet the challenges ahead. We have a number of interesting classes for you this term including some rarely offered classes (ex; Animal Behavior). This should be a good semester and I wish you well in it.

Sincerely,

Frank Logiudice

Undergraduate Program Coordinator, Department of Biology

University of Central Florida

Orlando, FL 32816

407-823-2495

A Welcome to New Biology Majors

Welcome to the University of Central Florida and to the Department of Biology. This is an exciting time with many challenges and opportunities awaiting you. We hope that you make the most of your experience here. The Department of Biology wishes to help you towards that end. Please take the time during your first few weeks at UCF to stop by the Biology Office (Biology Building room 301). At the Biology Office you can request to have a Biology faculty member assigned to you as your advisor. Although you have many excellent sources of advising available to you, you should also make use of an advisor in your major. Only someone in Biology knows the best balance of courses to take and which courses to take towards achieving your goals with a B.S. in Biology. Whether your goals are to attend professional school (e.g. medicine, veterinary, dental, etc.), attend graduate school, or to immediately enter the workforce we wish to help you.

Please feel free to contact the department with your questions and concerns. Good luck with your first semester at UCF. We hope that it is a productive and rewarding experience for you.

Sincerely,

Frank T. Logiudice

Undergraduate Program Coordinator, Department of Biology

University of Central Florida

Orlando, FL 32816



Mission Statement

It is the mission of the Department of Biology to provide a high quality education in Biology that is rich in numerous educational and practical experiences for our students. This education is well designed to prepare the students for their future endeavors. These endeavors include: success in professional health school (such as medical, dental, veterinarian, etc.), success in graduate school (either Masters or Doctoral), or success in a career in the biological sciences. The department provides programs in:

- (1) Bachelor of Science in Biology
 - (a) Bachelor of Science in Biology; Preprofessional Track
 - (2) Minor in Biology
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Announcements

1) Fall 2010 Important Dates

- (a) Graduation Application: June 28-August 27
- (b) Classes Begin: 23 August
- (c) Add-Drop: Add is Friday August 27. Drop is Thursday August 26
- (d) Withdrawal Deadline: October 15
- (e) Grade Forgiveness Deadline: October 15
- (f) Classes End: December 6
- (g) Final Exam Period: December 7-13
- (h) Grades Due: December 18
- (d) Fall Graduation: December 17

2) Biology Exit Exam:

Students planning on graduating in Fall 2009 must take the Comprehensive Exit Exam this semester. The exam will be held on **Friday November 5th at 2:00 PM** in BL 304 and on **Saturday, November 6th at 11:30 AM** in BL 304.

(a) You must sign up for the Comprehensive Exit Exam at the Biology Office (BL301) by **September 17th** to be eligible to take the exam. Students must take the Comprehensive Exit Exam and earn a passing score to graduate.

(b) Unlike past years, students must pay to take the Biology Exit Exam. Students must pay the UCF Bookstore for their exam. The payment period will be between **September 20 and October 1**.

Please note that since the student is now required to pay for the test we have much less flexibility than we have had in the past. If you miss these deadlines you will be forced to delay your graduation until the spring..

3) Knights Email

All undergraduate students are required to use their UCF Knights Email account. This account is the email address listed on all class rosters and is the one that faculty will be using to communicate with students. You need to check your Knights Email account regularly to keep informed about class and UCF announcements.

4) Job and Research Opportunities

(a) Job Opportunities are posted on the corkboard outside of BL 301 as they come in. You should check it on a regular basis if you are looking for employment in Biology.

(1) Ecological Research Station, KSC – Vegetation Sampling

The Ecological Program at KSC (my old group) is looking for some assistance regarding vegetation sampling and restoration work (beginning this June through next year). It will be for up to @ 1700 hours. One half to three quarters time work schedule is feasible. Pay is good, work is field oriented (vegetation sampling and plant ID knowledge useful). If you are interested in this work opportunity please contact me.

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(b) Office of Undergraduate Research is an extremely helpful department that is able to assist you with research opportunities. They can be reached at www.OUR.ucf.edu

(C) Research Opportunities are posted throughout the Biology Building, particularly around BL 301. Some of these positions are paying or may be taken for course credit as an independent study.

(1) **Homosassa Springs Wildlife State Park COLLEGE STUDENT INTERN PROGRAM**

Introduction

The Wildlife Care Department of the Ellie Schiller Homosassa Springs Wildlife State Park offers internships to students who are currently enrolled in biology-related undergraduate and graduate programs at accredited colleges and universities. Although most of our interns work here during the summer, our program is open all year to qualifying applicants.

Benefits

No pay is earned during the internship experience in our Department, and transportation, room, and board are the responsibility of the intern. However, we have two bedrooms inside our Felburn Wildlife Care Center that are available on a first-come, first served basis to successfully placed interns. The bedrooms share

a full bath, and a kitchenette with microwave oven and refrigerator are available 24-hours a day to interns living in the Center.

Time Commitment

Although the position of intern is a specialized volunteer placement, for the internship to be validated, we require a time commitment of 30 hours per week for at least 6 weeks. Additional hours can be accommodated, up to a 40-hour work week. The weekly schedule will vary depending on the duties assigned.

Summer Session: May-August

Fall Session: September-December

Spring Session: January-April

Duties

Your service at the Park will include care of wildlife and their enclosures, maintenance and housekeeping inside the Center, and presentation of educational programs. Interns work with ALL of the Park's wildlife; there are no positions available to work exclusively with manatees.

You may pursue a specific research project along with your duties. Your proposal must be submitted in writing for approval by the Wildlife Care Supervisor. This proposal must include an introduction describing your goals and objectives, materials and methods, and an estimate of the amount of time required to complete the project.

What follows is a basic outline of the job responsibilities of an intern at the Ellie Schiller Homosassa Springs Wildlife State Park. They are based on the job description of a Wildlife Care Ranger; however, some requirements have been eliminated to realistically accommodate the abilities of a temporary intern. Your specific job description may be altered depending on the instructions of the Wildlife Care Supervisor.

VISITOR SERVICE

Explains facilities and services provided for public use. Meets visitors, answers questions and provides information and directions. Provides informative and accurate information to the public.

RESOURCE MANAGEMENT

Follows instructions and implements wildlife management plans. Intern will be expected to read and research existing park literature to fully understand the state's philosophy on ecosystem management.

MAINTENANCE

Intern may be asked to help maintain and repair buildings, fences, trails, service roads, boardwalks, docks and other facilities. You will be expected to maintain cleanliness of grounds and facilities.

ADMINISTRATION

Intern is expected to keep accurate records relating to wildlife care.

Understanding state required forms on a wide range of subjects will be necessary.

PROTECTION

Intern must ensure park rules are followed for the enjoyment of the visitor.

Attire

We are a uniformed service. Interns wear a gray volunteer T-shirt provided by the Park. When presenting educational programs, you are required to wear a plain

white or grey shirt with collar and buttons down the front, which is not provided by the Park. The Park will issue a nametag for the shirt. You must wear black shorts or slacks with the white shirt or the T-shirt. Black socks and black shoes (athletic shoes are acceptable) must be worn with slacks, and white accessories must be worn with the shorts.

Process

Interns will be interviewed and placed by the Wildlife Care Supervisor, Susan Lowe. Additional training will be provided on-the-job and through workshops. If you are interested in an internship with us, please contact Allyssa Kordon at (352) 628-5343 ext 1006 or via e-mail at Allyssal.Kordon@dep.state.fl.us.

To Apply: Send the following information in one mailing to Allyssa Kordon, Homosassa Springs Wildlife State Park, 4150 S. Suncoast Blvd, Homosassa, FL 34446:

- Name, home and college addresses and phone numbers, email address (particularly important is a phone number where you can be reached during the day)
- Name of college, university, current academic status, curriculum (major and minor)
- Degrees held or expected with institution names, dates and anticipated completion dates.
- A statement defining your interest in pursuing this position. The statement should mention relevant experience, career goals and reason for wanting this internship. Your statement is very important during application evaluations, as they will be shared with the Wildlife Care Team prior to interviews.
- The session you are applying for must be indicated (Spring, Summer or Fall).

(d) Undergraduate Research Grant Opportunities are posted on the corkboard outside of BL 301 as they come in.

1) Orange County Watershed Action Volunteer Program

For nearly a decade, the Orange County Watershed Action Volunteer (WAV) program has worked in concert with the St. Johns River Water Management District to educate citizens, provide ecological restoration, and monitor water bodies in the St. John's River Watershed. WAV is active in 14 counties within the St. John's River Water Management District's 18 county service area. The Orange County WAV Internship program is one of many volunteer opportunities for College and High School Students available through this dynamic program.

Internship Program Guidelines:

- Students must commit to a semester long program (with option to extend)
- Internships available Fall, Spring, and Summer – two internship options are available: Environmental Education and Environmental Science
- Students must complete WAV Internship Application, WAV Volunteer Forms, and Pass Background Screening
- Internship can be used for Directed Independent Study with support of Professor or for Internship Credit if applicable
- These are unpaid Internships with the opportunity to become a paid internship after initial commitment has been met

- Community Service and Service Learning Hour Documentation available upon request

- Travel expenses related to volunteer activities may be tax deductible, documentation available upon request

- Additional Volunteer Opportunities are available through the WAV program and will be emailed on a monthly basis to all WAV Interns

a) WAV Environmental Educational Internship Program Description:

- 1) WAV Intern will attend an orientation and training session

- 2) WAV Intern will participate in a Watershed Panel with local experts and scientists

- 3) WAV Interns work with WAV Coordinator to identify community needs for watershed education programs

- 4) WAV Intern will provide a minimum of five presentations (for youth or adult audiences)

- 5) WAV Intern will provide a two page summary to document and reflect upon experiences (additional documentation may be required by individual professors for internship or Directed Independent Study Credit)

- 6) After successful completion of program WAV intern will be evaluated to continue as appropriate

** Presentations are generally 30-60 minutes in length and can be done in pairs or alone

** WAV Interns are encouraged to complete more than one youth presentation at a school to minimize travel time and expenses

b) WAV Environmental Science Internship Program Description:

- 1) WAV orientation and training session

- 2) Watershed Panel with local experts and scientists

- 3) WAV Interns will choose one project to assist Orange County Environmental Protection Division from list of available opportunities

- 4) WAV Interns Volunteer a Minimum of 8 hours per week at the Orange County Environmental Protection Division Office

- 5) WAV Interns will be given work space and an Orange County Employee to Mentor their project and internship

- 6) After successful completion of the project, WAV Intern will turn in project deliverables as required by Orange County (additional documentation may be required by individual Professors for internship or Directed Independent Study Credit)

- 7) After successful completion of program WAV Intern will be evaluated to continue as appropriate

Contact Information to WAV Coordinator

Carrie Mohanna

Orange County WAV Coordinator

Orange County Environmental Protection Division

800 Mercy Drive, Suite 4

Orlando, Florida 32808

Office: 407.836.1430

Cell: 407.433.8505
Fax: 407.836.1499
Email: WAVOrange@sjrwmd.com

5) Registering for Spring 2011

The registration period for most students for Spring 2011 will be in October. You should plan on meeting with your Biology Advisor in late September so that you have everything planned out when your registration window opens. If you do not know whom your advisor is, please contact the Biology Office (BL 301, 407-823-2141). Remember: it is always important to consult with your major advisor when planning out classes.



Biology Faculty

The Department of Biology is fortunate to have many excellent faculty dedicated to teaching our undergraduate students. In the future I intend to profile one faculty member per newsletter. For this first newsletter, and since a number of you are new to UCF, I am will simply direct you to the UCF Biology Faculty and Instructor webpages. For professors go to: http://biology.cos.ucf.edu/faculty_index.php and for instructors go to: http://biology.cos.ucf.edu/faculty_instructors.php. (I am not responsible for the ages of some of these photos.)

1) Faculty Departures and Arrivals

(a) Unfortunately this summer one of our faculty, Dr. Kevin Woo, chose to leave UCF. In the short time that he was with us, he became an important member of our department and he will be missed.

(b) We have been fortunate to add two new faculty members. They are Dr. Gregg Klowden and Dr. Mary Beth Manjerovic. Many of you will have one or both of them in your classes. Dr. Klowden is team teaching Biology 2 and Ecology. Dr. Manjerovic is teaching a section of Biology 1 and Animal Behavior. Some of you may already know Dr. Manjerovic. She was a graduate student in our department who received her Ph.D. this summer.



Prehealth Professional Students

Can I Go To Medical School With a Degree in Biology?

Yes!

Prehealth Professional students (often referred to as “preprofessional students”) are students who are preparing to enter into a health professional program after graduating from UCF. There are a variety of professional health programs that these students plan to attend, and to matriculate from, so as to succeed in their dreams of serving in the professional health field. These programs include: Allopathic Medicine, Chiropractic Medicine, Dentistry, Veterinary Medicine, Optometry, Osteopathic Medicine, Pharmacy, Physician Assistant, and Podiatric Medicine.

There are many pathways that a prehealth professional student may take to succeed at UCF. Regardless of what some believe, there is no one major that ensures a student’s success at this endeavor. In fact any major with the appropriate courses may allow a student to achieve his/her goal. However, due to academic strength, science majors tend to prepare prehealth professional more effectively. Prehealth professional programs tend to prefer students who have shown that they have the potential to handle the rigorous demands of their programs by having been exposed to a science-based curriculum. At UCF we have a number of undergraduate programs that can serve to prepare a preprofessional health student for the next step in his/her education. These programs include: Biology, Chemistry, Molecular Biology & Microbiology, Psychology, and Interdisciplinary Studies.

The Department of Biology has a Biology-Preprofessional concentration that is well designed to assist a student in gaining admission to and succeeding in a professional health program. The program has a number of core courses that will prepare a student for the required standardized entrance examinations and will give the student a firm foundation for the scientific requirements of the health professional program. These core courses include: Biology 1 (BSC 2010), Biology 2 (BSC 2011), Chemistry 1 (CHM 2045), Chemistry 2 (CHM 2046), Organic Chemistry 1 (CHM 2210), Organic Chemistry 2 (CHM 2211), Genetics (PCB 3063), Physics 1 (PHY 2048 or PHY 2053), Physics 2 (PHY 2049 or PHY 2054), and Molecular Cell Biology (PCB 3023). In addition, the Biology-Preprofessional concentration allows for studying in a number of upper division restricted electives that are extremely beneficial to the serious prehealth professional student. Upper division restricted electives such as: Biochemistry (BCH 4053), Genetics 2 (PCB 4514), Comparative Vertebrate Anatomy (ZOO 3713c), Embryology (ZOO 4603c), and General Microbiology (MCB 3020c); give the student an extensive knowledge base to get him/her off to a very good start in any health professional

program.

In addition, the graduation requirements of the Biology-Preprofessional concentration give the student a degree of academic flexibility. UCF requires a minimum of 48 credit hours of 3,000 and above level courses for graduation. The basic requirements of the Biology major require a minimum of 35 hours of 3,000 and above level courses. That leaves a 13 credit hour discrepancy that a student can use in any way that he/she feels will best prepare him/her to succeed in a health professional program. It typically is most beneficial if the student works closely with his/her academic advisor to choose these courses.

The Department of Biology has a number of faculty serving as academic advisors who are well versed in the requirements of a health professional program and the requirements for acceptance into such programs. These advisors have many years of experience advising preprofessional health students and assisting them in reaching their goals.

The Department of Biology has a number of other resources that will also assist the prehealth professional student to prepare for a professional health program and to separate himself/herself from other applicants. These resources include: internships, independent studies, and research opportunities. All of these resources demonstrate scholarly interest and academic initiative of the nature favored by professional health program admittance committees.

The prehealth professional concentration of the Biology undergraduate program possesses many resources and opportunities that will benefit the prehealth professional student. The concentration in particular, and the degree program in general, will serve the serious student well in achieving his/her goal of entering into, and succeeding in, a professional health program.

1) Prehealth Professional Advisement

- (a) Office of Pre-Professional Advising (OPPA): The website can be found at <http://www.oppa.ucf.edu/>. They will be adding information to the website on a regular basis throughout the year so please check it often. They are located in:

Ferrell Commons, Building 7G, Room 215C

Tel.: 407-823-3033

Fax: 407-823-0175

Email: oppa@mail.ucf.edu

They will meet with students mostly by appointment, but also on a walk-in basis when available.

They are also available through facebook at:

<http://www.facebook.com/pages/OPPA-at-UCF/168620655705?ref=ts>

- (b) Pre-Health Professional Advisement Office (PPAO): The website can be found at http://www.biomed.ucf.edu/index.php?option=com_content&task=view&id=50&Itemid=77. They are located in:

HPA 1, Room 124

Tel: 407-823-2670

Fax: 407-823-6051

Email: galopez@mail.ucf.edu
syantz@mail.ucf.edu

They will meet with students typically on a walk-in basis but will set up appointments if requested.

2) Preveterinary Shadowing Opportunity:

Arrangements have been made with University Animal Hospital (9357 University Blvd, Orlando - (407) 657-7297) to allow UCF students to shadow with the veterinarians. Any student who is interested should meet with Frank Logiudice (BL 301c). Shadowing will occur in the mornings of Mondays, Thursdays, and Fridays (when they typically conduct surgeries). UAH only wants one student per day. That way we can accommodate 3 students per week. Students will be rotated through for 4 shadowing days (4 weeks). At the end of the month 3 new students will be brought in. This way up to 12 students can shadow per term (based on interest level). Thank you to UAH for giving our students this wonderful opportunity!

3) Prehealth Professional Organizations

There are a number of prehealth professional organizations on campus. These are student clubs that are dedicated to helping student to prepare for, and to apply into, a career in the health professions. They are a great way to learn what challenges await you and to prepare for them. Club events include visits to health professional programs, visits with faculty and students at professional schools, shadowing opportunities, and charity events. You should explore these clubs. Typically the first week in September is when they have their first meetings for the fall semester. Some of the clubs are:

- (a) Premedical-AMSA for students interested in medical school:

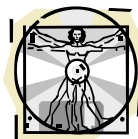
<http://www.premedamsa.com/>

- (b) Predental-ASDA for students interested in dentistry: <http://pdasda.com/>

- (c) UCF-Preveterinary Club for students interested in veterinary medicine:

http://pegasus.cc.ucf.edu/~prevet/PreVetSite/The_University_of_Central_Florida.html

- (d) Pre-Professional Medical Society for students interested in a variety of health fields: <http://ppmedsociety.org>.
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Science Information on the Web

There are a number of useful websites that you may use to keep yourself up to date on developments in Biology. You should take the time to periodically check on a few of them. For one reason, this is an area of your own interest. You will usually find a story that interests you or helps you with a topic in one of your classes. For another reason, schools/programs that you will be applying to in the future often expect this and you may have some related questions in your interviews. I will list three sites for you:

- 1) <http://www.sciencedaily.com/>. This is a very good site. It updates with a new story every few hours on weekdays. It is slower on weekends but still, in my opinion, the best of the three.
- 2) <http://news.nationalgeographic.com/news/index.html>. This site usually updates once a day (around 4:00 pm) on weekdays and not on weekends.
- 3) <http://news.excite.com/index/id/sciencelap.html>. This is a good site but it updates sporadically.



Seminars

Seminars are a weekly departmental event where current topics in biology are discussed. UCF faculty and visiting faculty present a paper at the seminar and answer questions. It is a good way to learn some information about your field (s) of interest in biology. Seminar is a graduate level class. However, it is open to interested undergraduate students (as long as seating allows). The topic and speaker are posted throughout the Biology Building prior to the event. Seminars are held in BL 209 on Mondays at 3:00.

<u>Date</u>	<u>Speaker</u>	<u>Institution</u>	<u>Title/Theme</u>
August 23	No seminar		
August 30	Ross Hinkle	UCF Biology	"Carbon flux studies in Central Florida ecosystems – Past, Present, and Future"
September 6	LABOR DAY		
September 13	Eric Hoffman	UCF Biology	"Using population genetics to investigate evolutionary history and conservation"
September 20	TBA		
September 27	Colette St. Mary	University of Florida	Fish behavior