CONGRATULATIONS BIOLOGY AND ZOOLOGY GRADUATES! Best of luck to you all!
Commencement information can be found here:
http://www.natsci.colostate.edu/current-students/graduation/

Features in this month’s newsletter
Page 2. Registration Information
Page 3. TILT workshops & summer classes
Page 4. New BZ course—BZ481A3 Marine Mammalogy
Pages 5-7. Internships
Page 7. Seminar Series

May 2015
Important Dates
8 Last day of spring classes & University Withdrawal Deadline
11-15 Final exams
15-16 Commencement ceremonies
20 Spring grades available on RamWeb & last day to add/drop a course in the first 4-week summer term
25 Memorial Day—no classes
31 Last day to add/drop a course in the 12-week summer term

Academic Support Coordinators will be available for appointments and over email during Summer. As always, appointments can be made online at:
http://www.biology.colostate.edu/undergraduates/schedule-an-appointment/
CHECK OUT THE CHART BELOW IF YOU ENCOUNTER A REGISTRATION ERROR

<table>
<thead>
<tr>
<th>Error message</th>
<th>What it means</th>
<th>When you might get it</th>
<th>What to do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class level</td>
<td>Only students in a certain class level (fr/so or jr/sr) can register for this course.</td>
<td>Few (if any) Biology courses have this restriction but other departments’ courses (e.g., Psychology) may have it.</td>
<td>If you NEED the course, contact the home department for access.</td>
</tr>
<tr>
<td>Multiple Components Required</td>
<td>In addition to the lecture, you have to register for another component (lab or recitation) at the same time.</td>
<td>Many biology, chemistry, and physics courses are commonly associated with this error.</td>
<td>Check boxes for each component PRIOR to hitting &quot;register.&quot; Click the CRN for the lecture to see specifically which sections of lab/recitation that must be selected.</td>
</tr>
<tr>
<td>Major</td>
<td>You do not have the right major for a class.</td>
<td>Some classes are restricted just to students in that major (ex: Business/Art). Some restricted courses may allow non-majors to register after a certain date.</td>
<td>Click on the CRN for details about major restriction—if the class opens to non-majors at a certain date, it will tell you that info here.</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>You fail to meet at least one prerequisite for the class.</td>
<td>Most biology courses have prerequisites (ex: BZ310 requires 1 semester of organic chemistry as a pre-requisite).</td>
<td>You need to take the prerequisite courses prior to registering for the course in question. If you think this is an error, contact your advisor.</td>
</tr>
<tr>
<td>Dept./Instructor approval</td>
<td>Registration for a certain class is limited and only approved on a case-by-case basis.</td>
<td>An example is BZ505 Cognitive Ecology - it requires permission from the instructor for undergraduates to enroll.</td>
<td>If you seek access to a class requiring dept./instructor approval, contact the instructor listed or the department.</td>
</tr>
<tr>
<td>Stop enrollment</td>
<td>A department has stopped enrollment so that no one can register for the class until a problem is resolved.</td>
<td>Hard to say—stop enrollments can happen in any department due to unforeseen changes.</td>
<td>Try registering for a different section of the same class, or contact the department to find out more information.</td>
</tr>
</tbody>
</table>

Probation student reminder: you need to meet with an advisor to receive your advising code. If you have not already, please make an appointment now so you can register before classes are full! We cannot release advising codes over email or during walk-ins.

NEED AN OVERRIDE? READ THIS!

The Academic Support Coordinators can only provide limited types of overrides. For any type of override, you need to contact the department that offers the course you are trying to take. The Department of Biology only offers (and can only assist with) BZ and LIFE courses. For all other courses, you can look up the departments you need to contact online at: www.colostate.edu.

Only an instructor can override you into a course if you have not met the pre-requisites or it is full. You may contact the instructor directly with those types of override requests, but they are rarely granted!
FINALS ARE APPROACHING! DO YOU FEEL READY?
TiLT Will Be Offering Pre-Finals Preparation Workshops, covering:

- Tips for different exam formats (ex: multiple choice, true/false, short answer, essay)
- Making the most of your study time

**Dates and Times**
Monday May 4 at 4:00 PM  
Tuesday May 5 at 5:00 PM  
Thursday May 7 at 6:00PM  

TiLT 221  (The Great Hall)

Workshops are free to CSU students and last 50 minutes  
*Refreshments provided!*

**SEATS ARE STILL AVAILABLE IN BIOLOGY SUMMER COURSES!**
There are still seats open in a number of Biological Sciences and Zoology major courses this summer! Courses include:

- **LIFE 102**– Attributes of Living Systems  
- **LIFE 103**– Biology of Organisms  
- **LIFE 320**– Ecology  
- **BZ110**—Principles of Animal Biology  
- **BZ111**—Animal Biology Laboratory  
- **BZ 220**–Introduction to Evolution  
- **BZ 223**—Plant Identification  
- **BZ 300**—Animal Behavior  
- **BZ 310**—Cell Biology  
- **BZ 311**—Developmental Biology  
- **BZ 350**—Molecular and General Genetics  
- **BZ 479**—Biology and Behavior of Dogs

**REGISTER FOR THESE AND MORE ON RAMWEB**
Act now to ensure you get a seat!
Exciting New Course for Fall 2015
BZ481A3: Marine Mammalology

Instructor: Shane B. Kanatous

Meeting times: 8:00-9:15 TR
Yates 208

Pre-Requisites: BZ214 & BC351

Biology Major Fields: Aquatic Biology, Ecology (List A), Integrative Organismal Biology (List B)

Upper Division Zoology credit

Zoology Minor: Aquatic, Ecology, and Vertebrate

General Info: Mixture of formal lectures, written assignments, discussion groups and student presentations examining the integration of marine mammals and their environment.

Course Goals:
* Contrast the properties of the marine and terrestrial environments on the physiological traits of mammals
* Interpret an organism’s form and function in relation to the physical properties of the marine environment
* Organize the diversity of marine mammals into their ecological roles
* Describe and discuss food webs from primary producers to apex predators
* Demonstrate the importance of the marine mammals as ambassadors to marine conservation
* Critically and effectively debate and discuss the influence of human populations on the marine mammals
* Recommend new avenues for the preservation and management of marine mammals
Position Title: Informal Science Education Intern

Company/Organization: Denver Botanic Gardens, Dept. of Research & Conservation

Employer Contact: submit a cover letter and your c.v. through the University of Colorado-Denver Experiential Learning Center: http://www.ucdenver.edu/life/services/ExperientialLearning/internships/Pages/InternLink.aspx

In the letter please convey your interest in the internship, and what semester(s) you would be available.

Time Commitment: 10-20 hours/week for 10-15 weeks (135-140 hours total)

Wage/Salary or Unpaid: $10/hour

Position Description: The Denver Botanic Gardens Research and Conservation Department plays a critical role in the conservation, preservation, and documentation of native Colorado flora. This position will work with both the Research and Conservation Department and the Exhibit Department. The intern will assist Gardens staff with current informal science education and will write a report that outlines strengths and weaknesses of current opportunities for visitors and proposes next steps to improve informal science education at the Gardens.

Specific responsibilities:
Provide demonstrations in Science Pyramid
Assist with the development of education programming
Participate and recruit in citizen science projects, such as phenology walks
Prepare and present interpretive programs to visitors

Minimum Qualifications:
Interest in pursuing a career in a related field
Ability to work independently with minimal supervision
Comfortable interacting with visitors of all ages
Exhibit good problem solving skills, flexible, organized and creative
Attention to detail/detail oriented

Requirements:
Currently enrolled in college programs and completed sophomore year with a minimum GPA of 3.0 (4.0 scale).
Completion of one semester of education related course work
Transportation to and from site (Denver Botanic Gardens at York Street)
Be able to perform moderate walking, frequent standing, stooping and climbing stairs
Pass background check

If you are interested in either of the Denver Botanical Gardens Internships, please speak with an ASC for additional information!
INTERNSHIPS

Position Title: Applied Conservation Intern
Company/Organization: Denver Botanic Gardens
Employer Contact: submit a cover letter and your c.v. through the University of Colorado-Denver Experiential Learning Center:
http://www.ucdenver.edu/life/services/ExperientialLearning/internships/Pages/InternLink.aspx
In the letter please convey your interest in the internship, and what semester(s) you would be available

Time Commitment: 10-20 hours/week for 10-15 weeks (135-140 hours total)
Wage/Salary or Unpaid: Unpaid

Description:
The Denver Botanic Gardens Research and Conservation Department plays a critical role in the conservation, preservation, and documentation of native Colorado flora. You will have the opportunity to work alongside scientists to better understand applied conservation science and how it impacts conservation management of rare species. This position will work with the Research Associate in the Denver Botanic Gardens Research and Conservation Department. The position will be located at the Denver Botanic Gardens at York Street and will include travel off-site. The intern will assist in field ecology data collection, management, and analysis. Throughout the spring, summer, and fall, an intern can join staff on demographic surveys of rare and federally listed plant species endemic to Colorado. Field trips will illustrate study design and implementation. Trips generally last 4 days and three nights to locations in Western Colorado including Grand Junction, Gunnison, and Delta approximately twice a month from April to September. When on site at Denver Botanic Gardens, the intern will enter and organize data for analysis using the open source database, MySQL, and statistical software, R. In collaboration with staff, students can develop a novel study question based on our existing long-term data sets or conduct existing analyses which are reported annually to the Bureau of Land Management and Fish and Wildlife Service to advance protection of these imperiled species.

Specific responsibilities:
Plant identification
Field data collection, management, and analysis
Attend weekly research meeting at Denver Botanic Gardens at York Street, when possible

Qualifications:
Interest in pursuing a career in a related field
Ability to work independently with minimal supervision and long hours in variable outdoor conditions
Attention to detail/detail oriented
Proficient with Microsoft Word and Excel

Requirements:
Currently enrolled in college programs and completed sophomore year with a minimum GPA of 3.0 (4.0 scale)
Completion of one semester of botany and one semester of ecology and some field experience
Ability to lift a minimum of 30 pounds
Transportation to and from site (Denver Botanic Gardens at York Street)
Appropriate field gear: sun hat, long sleeved shirts, day pack, hiking boots/shoes, field pants, water bottles
Will sign fieldwork waiver.
**INTERNSHIPS**

Field-research Technician opportunity in Wildlife Ecology with Montana State University/ USGS

**Position Description:** As a wildlife field technician with Montana State University, you will get to work across five mountain ranges in the northwestern United States. You will be assisting a graduate student (Will Thompson) in conducting fieldwork related to American pikas (*Ochotona princeps*), alpine ecosystems, and their relationships to contemporary climate and other drivers. Some of the incumbent’s specific duties will include: work as part of a field crew, typically in remote mountain environments (to elevations above 12,000 feet), searching for and enumerating mammals and their sign using distance sampling on (rocky) talus and scree slopes often in early morning and end of the day, extensive navigation by compass and topographic map (and a GPS unit when topography and cloud cover allow), shrub and tree species identification and cover measurements, deployment and retrieval of microclimatic sensors, measurement of slope and aspect, careful recording and organization of data on datasheets, care and maintenance of field equipment, and data entry and checking. Technicians will also be backpacking, on multiple day trips, in five of the most stunning and ecologically unique mountain ranges in the United States.

**Location:** Bighorn Mountains, WY. Beartooth Mountains, MT. Sawtooth Mountains, ID. Pioneer Mountains, ID. Steens mountain, OR. Bozeman, MT, and potentially parts of the Great Basin, Glacier National Park, Grand Teton National Park, Zion national park, Bryce Canyon National Park and Cedar Breaks National Monument.

**Pay:** Volunteer with the opportunity to earn a living stipend

**Schedule:** Approximately June 1st 2015 (weather-dependent) to approximately August 24th 2015 (flexible)

**Requirements:** high school diploma, US driver’s license, able to hike up to 15 mile/day for 10 days straight, able to overnight tent camp in remote locations up to 10 days at a time, have some experience with backcountry camping and orientation

**Physical Demands and Working Environment:** Field sites for this project are in remote locations located across the northwestern United States. Hiking and backpacking in high altitudes (above 12,000 feet) over rough, uneven mountainous terrain or through dense forests; lifting and carrying of moderately heavy items (up to 40-pounds); hiking up to 15 miles per day for 10 days straight; overnight tent camping for up to 10 days at a time will be required. We will encounter extreme weather conditions and physical hardships; will be working in high altitudes (above 12,000 feet) on talus and scree slopes. Incumbent must be self-sufficient in remote backcountry mountainous areas. Much of this work will be conducted in grizzly bear country and in remote areas with no immediate medical access. As such safety is a key priority for this field season.

**Benefits**
- Working in beautiful mountains across the northwestern United States
- Camping in remote locations that are rarely accessed by the public
- Experience working with a charismatic mammal
- Collecting meaningful data on a species that has been considered for listing under the Endangered Species Act
- Learning new field techniques
- Establishing a network with researchers across the western United States
- Training on project specific methods, detailed overview of pika literature, and insight to project

**Desirable qualifications**
- Experience in collection of field data, and identification of western-USA plant species
- Wilderness first aid training, and a safety oriented mindset
- Interest in ecology, wildlife, climate, physical geography, and scientific research
- GIS, remote sensing, statistics, wildlife biology
- Critical-thinking skills, attention to detail, and positive attitude
- Experience driving large vehicles with 4WD

**How to Apply:** Send a cover letter, curriculum vitae/resume, and a list of three reference (names, email-addresses, and phone numbers) by May 4th to Will Thompson at wwtompson91@gmail.com
Butterfly Pavilion offers a number of internship programs throughout the year, allowing students to obtain real-world experience in the fields of entomology, horticulture, education, and more. Interns complete and present an independent project at the end of their term at Butterfly Pavilion.

Students interested in a Butterfly Pavilion internship are encouraged to check the academic internship requirements at their educational institution before applying.

Learn more information here:
http://www.butterflies.org/support/internship-program

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The current President and Vice President of ASCSU are looking to hire dedicated students to fill our executive cabinet. We have 26 paid positions with competitive salaries on par with other campus leadership jobs.

No previous ASCSU experience is required to apply, only a passion for service students. For more information about available positions and how to apply, please visit:
https://sydalba2015.squarespace.com/take-action/

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**SEMINAR SERIES—PHD SEMINARS**

**Eva Fischer** “Flexibility and constraint in the evolution of gene expression and behavior”

Tuesday May 5th, 2015 at 4:00 PM in Anatomy/Zoology Building W118

**Luke Tembrock** “Legend, history and ethnobotany as a basis for testing alternative hypotheses on the origin, dispersal, evolution and chemistry of Catha edulis (qat)”

Wednesday May 6th, 2015 at 4:00 PM in Yates 206

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Enjoy your summer break!

“Looks aren’t everything. It’s what’s inside you that really matters. A biology teacher told me that.”