INSTRUCTOR: Katherine Rasmussen

Course Number: BIOL 103 U820T / 103L U820T

Class Meetings: Online

Laboratory: Online

Biology 103/103L: Biology Survey II and Lab

Prerequisite: None

Course Description: The second of two courses in the general course sequence for non-majors in the biological sciences. The course will cover major concepts concerning ecology, fungal and animal diversity, tissues, organ and organ systems, and animal structure and function. A lab component (BIOL 103L) is required component of the course.

This undergraduate biology course is designed to be a broad survey of the general principles of Biology. In addition to the concepts presented students will also be learning the vocabulary of biology and scientific method.

Mastering Biology homework activities, online labs, and proctored exams are required parts of this course and will be described later in this document.

Required Materials

Textbook: Two Options for New Students (students that did not take BIOL 101, U820T, Online, Fall 2017)

2. or Pay for the e-text (Campbell’s Biology Concepts and Connections. 9th Ed (2018)) with Mastering Biology when you access the course in D2L.

*If you were enrolled in Biology Survey I (BIOL 101/101L U820T (online)) during the fall of 2017 and bought 12 month access (or the textbook with the access card), you will have access to Mastering Biology already.
*If you bought a used copy of the textbook (or a new textbook without the Mastering Biology access card) and did not take Biology Survey I (BIOL 101/101L U820T (online)) during the fall of 2017 you will be prompted to purchase Mastering Biology when you click on the link in our Desire2Learn course (~$95.00).

Labs: McGraw Hill Virtual Labs - Ph.I.L.S. 4.0 (Physiology Labs (units 2 & 3). The cost is $37.25 with a credit card. The other Virtual Labs (Units 1 and 4) will be provided free. Information on how to access and submit all labs is provided in D2L Getting Started widget and D2L Content. There is no lab book to buy.

Instructional Method: This course will be instructed entirely online via three resources

1. Desire2Learn - also known as D2L. (See Section below on Desire 2 Learn)
   a. Course information (Syllabus, Reading, Lab and Homework Activity Schedules, Lab and Homework Activity Access Information)
   b. Chapter PowerPoint Notes
   c. Dropbox for submitting labs and other assignments
   d. Discussion board for introductions and conservation ecology (see class schedule)
   e. Grades
2. Mastering Biology - also known as MB for homework (See Section above on Mastering Biology).
While this is an online class, it does not mean it is a self-paced or a correspondence-like course. Homework, activities and exams will be due each week. This will be outlined in the schedule at the end of this document and in D2L.

**Expectations:**

**Students**
Students are expected to read, understand and abide by all policies and procedures outlined in this syllabus, as well as those in the CDE Online Orientation, which can be accessed from the “Getting Started” widget on the course homepage. The latter contains important information about the various academic, student and technical resources and services available at USD.

The South Dakota Board of Regents defines a credit hour as one hour of classroom or direct faculty instruction, and two hours of out of class student work. This is a four credit-hour course, so students should expect to invest about twelve (12) hours per week in the course (readings and homework 9 hrs.; Lab 3 hrs.).

This is an online course, and meant to be an asynchronous experience. As we will not be meeting face-to-face, the SDBOR engagement requirement will be reproduced by the following activities: readings assigned in the textbook; PowerPoint notes, online lab exercises, online homework activities, other online practice activities.

Students are also expected to have and maintain the appropriate technology required to complete the course. For more information about this, please see the “Technology Requirements” towards the end of the syllabus. **Troubles with your personal computer is NOT an excuse for failing to meet deadlines. You must find a way to get online and meet course deadlines.**

**Instructor**
I will try to provide every possible opportunity for feedback, and return feedback. MB homework assignments and course exams are graded automatically and immediately. I will address any questions or concerns about the material or assessments and give feedback by e-mail as soon as possible (within 24 hrs. during the business week.). I will also abide by the policies set forth in this syllabus and those by the CDE Online Orientation, The University of South Dakota, and the SDBOR.

**Contacting Me**
**Do not use the D2L built-in e-mail program or the pager to contact me.** Please use the following e-mail to contact me; krasmuss@usd.edu. Also, when e-mailing me I ask that you identify yourself as one of my online BIOL 101 students. I will be happy to respond as quickly as possible (within 24 hrs. during the business week (Monday 8:00am – Friday 5:00)) and 48 hrs. on the weekend. During the business week you can expect a quick response to any e-mailed questions you may have.

Check your USD e-mail often (@coyotes.usd.edu or other SD board of regents institution e-mail address), because I may be sending out information through e-mail during the semester. You can easily access your university e-mail through the My USD Portal [https://myu.usd.edu/uPortal/f/welcome/normal/render.up](https://myu.usd.edu/uPortal/f/welcome/normal/render.up).

**Course Objectives:**

This course is designed to promote an understanding and appreciation of the biological world in which we live, the methods of science, and a better understanding of how our natural world works.

**Specific Goals / Objectives, Assessments**
- Identify the scientific principals behind the study of biology. (Assessment via Lab reports or quizzes, online homework and online exams)
- Demonstrate the scientific method through virtual laboratory exercises (Assessment via lab quizzes or reports)
• Identify and explain the basic concepts, terminology and theories of the biological sciences (Assessment via exams, online homework and online labs)

Assessments: You will be assessed for the above objectives by completing online exams, laboratory exercises, lab quizzes or reports*, and other activities as may be assigned. Homework assignments and exams** are graded automatically and immediately. Because of the online nature of this course, it is important that students receive regular feedback on their progress. To that end, there will be weekly assessments (Laboratory quizzes or reports and MB Homework) to assure that ample feedback is provided and that ample opportunity is provided to ask questions about the various course topics.

*Lab quizzes, lab reports and homework activities are open book or note, not timed or proctored. **Exams are closed book and must be proctored, so you will want to be adequately prepared before starting.

IMPORTANT: Make-up assessments will only be available under conditions such as serious illness, family emergencies, etc., and will be provided solely at the discretion of the instructor. Students must notify the instructor prior to missing any assessment due date.

Graded Assessments:
Graded assessments will be in the form of exams, homework, lab exercises and quizzes. Listed in the table below is the percentage of your overall grade for each exam, homework and lab quizzes.

<table>
<thead>
<tr>
<th>Graded Item</th>
<th>Percent of final grade</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>12.75%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>12.75%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>12.75%</td>
</tr>
<tr>
<td>Exam 4</td>
<td>12.75%</td>
</tr>
<tr>
<td>Labs / Lab quizzes or reports</td>
<td>25%</td>
</tr>
<tr>
<td>Homework Activities</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

There are four exams, equally weighted and generally composed of 30 to 50 questions (multiple choice, matching, multi-select and true or false). The four exams will comprise 50% of the course grade. The lab quizzes / reports are equally weighted and worth 25% of the course grade. There will be homework activities that will contribute to 25% of the course grade. Exams must be proctored—in other words, you will need to go to a specific place to take them.

WARNING: Exams must be proctored, you are allowed one 8.5” x 11” paper of hand written notes to use during the exam. Items that are prohibited are your book, or any other materials or resources while taking the exam. For proctor information, refer to pages 21-22 of the online student handbook, in the getting started widget on the homepage of the D2L course.

- On campus USD students and students residing near (within 10 miles) the University of South Dakota are required to take their exams at the USD testing center.
- If you live within 10 miles of, Pierre, Rapid City or Sioux Falls you are required to take the exams at the established testing centers in those areas (listed in the online student handbook), as they are equipped to meet the varied needs of students. Other professional testing centers in South Dakota or other states still need to fill out the proctor form.
• If you will not be using one of the CDE testing centers listed in the online student handbook, you must complete the CDE Proctor Form and return it to CDE within the first week of the semester. In order to maintain academic integrity, all proposed proctors must be approved by the CDE prior to their use. You will be responsible for any postage or proctoring fees incurred as part of this process. The Proctor Form can be accessed at http://www.usd.edu/~media/files/usd-online/proctor-form.ashx. You must return the completed proctor form to CDE, per the instructions at the top of the form.
  o This applies to testing centers not listed in the online student handbook and individual proctors like a librarian, teacher, military commander, etc..

**Final Grading:** Your final grade is calculated using straight percentages:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100%</td>
</tr>
<tr>
<td>B</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>60-69%</td>
</tr>
<tr>
<td>F</td>
<td>up to 59%</td>
</tr>
</tbody>
</table>

**IMPORTANT:** You can check your current running total grade during the semester by clicking on the Grades under the Assessments drop down box in D2L.

**Suggested Weekly Schedule (Student)**
While every student has differing work and class schedules here is a general suggestion for distributing the workload for a typical week:

<table>
<thead>
<tr>
<th>Day</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Start of the week; Start the week with your textbook reading and viewing the PowerPoints. Go to the MB Study Area for animations, short videos and interactive content and practice questions for the chapter(s) assigned. (NOTE: At any time during the week, you may complete the homework activities in MB for each chapter assigned and complete the lab.)</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Start your dynamic study module in MB for the week’s assigned chapters.</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Start assigned lab by reading the introduction and becoming familiar with the concepts presented in lab. Finish readings and begin the assigned chapter homework activities in MB.</td>
</tr>
<tr>
<td>Thursday</td>
<td>Open for work on assessments/quizzes, lab or exams</td>
</tr>
<tr>
<td>Friday</td>
<td>Open for work on assessments/quizzes, lab or exams</td>
</tr>
<tr>
<td>Saturday</td>
<td>Open for work on assessments/quizzes, lab or exams</td>
</tr>
<tr>
<td>Sunday</td>
<td>All homework and lab(s) are due by 11:00pm (central time) Sunday evenings. See the course schedule. Late work will receive reduced grade by 10% for each day late.</td>
</tr>
</tbody>
</table>

**Course Schedule:** Please see the table at the end of this document.

**Technology Requirements**
The University of South Dakota has established minimum technology requirements for participation in online courses. These are outlined under the “Technology Support and Requirements” section in the CDE Online Orientation document in the “Getting Started” widget on the D2L course homepage.

1. Desire2Learn (D2L):
D2L will be used to facilitate many aspects of the course. In D2L, you will be able to:

- View lecture PowerPoints
- Complete proctored exams
- Access course materials and syllabi and schedules
- Access your course progress and grades
- Access via a link to Mastering Biology
- Access via a link(s) to virtual labs
- Dropbox for submitting labs and other assignments
- Discussion board for introductions and conservation ecology (see class schedule)

To access D2L, please visit the following URL: [http://d2l.sdbor.edu/](http://d2l.sdbor.edu/) and enter your user name and password. You can also access D2L by logging into your USD Portal. [https://my.usd.edu/uPortal/f/welcome/normal/render.up](https://my.usd.edu/uPortal/f/welcome/normal/render.up)

2. **Mastering Biology:**
Mastering Biology is an online resource that provides homework activities designed to help you learn the material presented in the assigned readings in your textbook. **After you log into D2L the first time, you will be given information on how to access and/or register for our Mastering Biology course and e-text access. There is a link you must use in the D2L course homepage, which will take you to the Mastering Biology homepage for this course.**

3. **McGraw-Hill Biology Virtual Laboratories:**
Virtual labs by McGraw-Hill Publishing Ph.I.L.S. and other Virtual labs will be utilized to provide a virtual lab experience. **After you log into D2L the first time, you will be given information on how to access and register for the McGraw-Hill virtual labs Ph.I.L.S. 4.0.**

**Student Resources:**
The University of South Dakota provides a number of useful services to students:

- **CDE Online Orientation Guide (see link in the “Getting Started” widget on the D2L course homepage):**
  This contains very important information related to the services provided by the University of South Dakota as well as the University policies. In it, you will find such information as:

  - Academic support services such as the library, writing center, proctor and testing information, book purchasing, etc.
  - Student support services such as advising and enrollment information, financial aid, student life, and counseling, etc.
  - Technology support services like technology requirements, ITS Help Desk contact information, discounts on computers and software, etc.

- **USD Portal ([http://my.usd.edu/](http://my.usd.edu/)):**
The USD Portal is your one-stop place for a majority of services offered to any student taking a USD course—like this course. You can access the following services from the “Academics” tab in the portal:

  - WebAdvisor
  - I.D. Weeks Library
  - D2L
  -

- **The USD Writing Center ([http://www.usd.edu/academics/writing-center](http://www.usd.edu/academics/writing-center)):**
The USD Writing Center was established to provide writing assistance to students in order to help them become better writers. It is available on campus during regular business hours and online in the evenings. Please visit the URL above for more information.
Academic Integrity:
The College of Arts and Sciences considers plagiarism, cheating, and other forms of academic dishonesty inimical to the objectives of higher education. The College supports the imposition of penalties on students who engage in academic dishonesty, as defined in the “Conduct” section of the University of South Dakota Student Handbook.

No credit can be given for a dishonest assignment. A student found to have engaged in any form of academic dishonesty may, at the discretion of the instructor, be:

a. Given a zero for that assignment.
b. Allowed to rewrite and resubmit the assignment for credit.
c. Assigned a reduced grade for the course.
d. Dropped from the course.
e. Failed in the course.

Freedom in Learning:
Students are responsible for learning the content of any course of study in which they are enrolled. Under Board of Regents and University policy, student academic performance shall be evaluated solely on an academic basis and students should be free to take reasoned exception to the data or views offered in any course of study. Students who believe that an academic evaluation is unrelated to academic standards but is related instead to judgment of their personal opinion or conduct should first contact the instructor of the course. If the student remains unsatisfied, the student may contact the department head and/or dean of the college which offers the class to initiate a review of the evaluation.

Disability Services:
Any student who feels s/he may need academic accommodations or access accommodations based on the impact of a documented disability should contact and register with Disability Services during the first week of class. Disability Services is the official office to assist students through the process of disability verification and coordination of appropriate and reasonable accommodations. Students currently registered with Disability Services must obtain a new accommodation memo each semester. For information contact:

Room 119 Service Center
(605) 677-6389
Email: disabilityservices@usd.edu

Diversity and Inclusive Excellence:
The University of South Dakota strives to foster a globally inclusive learning environment where opportunities are provided for diversity to be recognized and respected.
### Tentative Course Schedule

Proctored exams will be online for five days for convenient scheduling.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics, Readings, Activities and Lab</th>
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<tbody>
<tr>
<td><strong>Unit 1 – Fungal and Animal Diversity</strong></td>
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<tr>
<td>Week 1: Jan. 8 - 14</td>
<td><strong>Introductions:</strong> Introduce yourself to the class via the discussion board in D2L. &lt;br&gt;<strong>Topics:</strong> Fungal Diversity  &lt;br&gt;<strong>Readings:</strong> Chapter 17; 17.12 – 17.17  &lt;br&gt;<strong>Lab:</strong> No Lab during the first week of class.  &lt;br&gt;<strong>Homework Activities:</strong> Activities for chapter 17 in MB  &lt;br&gt;(Chapter 17 homework is due 1/14 11:00PM Central Time)</td>
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<td>Week 2: Jan. 15 - 21</td>
<td><strong>Topics:</strong> Evolution of Invertebrate Diversity  &lt;br&gt;<strong>Readings:</strong> Chapter 18  &lt;br&gt;<strong>Lab 1:</strong> Classifying Arthropods (Link and Information in D2L Assessments → Dropbox)  &lt;br&gt;<strong>Homework Activities:</strong> Activities for Chapter 18 in MB  &lt;br&gt;(Lab 1 is due 1/21, 11:00PM Central Time)</td>
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<td>Week 3: Jan. 22 - 28</td>
<td><strong>Topics:</strong> Evolution of Invertebrate Diversity (cont.) and Evolution of Vertebrate Diversity  &lt;br&gt;<strong>Readings:</strong> Chapters 18 and 19  &lt;br&gt;<strong>Lab 2:</strong> Comparing Hominid Skulls (Link and Information in D2L Assessments → Dropbox)  &lt;br&gt;<strong>Homework Activities:</strong> Continue Activities for Chapter 18 in MB  &lt;br&gt;(Chapter 18 Homework and Lab 2 are due 1/28, 11:00PM Central Time)</td>
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<td>Week 4: Jan. 29 - Feb. 4</td>
<td><strong>Topics:</strong> Evolution of Vertebrate Diversity (cont.)  &lt;br&gt;<strong>Readings:</strong> Chapter 19  &lt;br&gt;<strong>Lab 3:</strong> Virtual Frog Dissection (Link and Information in D2L Assessments → Dropbox)  &lt;br&gt;<strong>Purchase and register for Virtual Labs Ph.I.L.S (link and information in D2L the Getting Started Widget and the D2L Dropbox) We will be using these lab for units 2 and 3</strong>  &lt;br&gt;<strong>Homework Activities:</strong> Activities for Chapter 19 in MB  &lt;br&gt;(Chapter 19 Homework and Lab 3 are due 2/4, 11:00PM Central Time)  &lt;br&gt;<strong>Exam: Arrange to take your proctored exam sometime next week (see below).</strong></td>
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<td><strong>Unit 2 – Animal Form and Function 1</strong></td>
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<td>Week 5: Feb. 5 - 11</td>
<td><strong>Exam 1 covering chapters 17, 18 and 19 will be online for the week beginning at 8:00am Monday, Feb. 6. The exam will go offline Friday, Feb. 9 at 11:00pm.</strong>  &lt;br&gt;<strong>Topics:</strong> Animal structure and Function  &lt;br&gt;<strong>Readings:</strong> Chapter 20  &lt;br&gt;<strong>Lab 4:</strong> Ph.I.L.S. Lab #2 Size and Metabolic Rate  &lt;br&gt;<strong>Homework Activities:</strong> Activities for Chapter 20 in MB  &lt;br&gt;(Chapter 20 Homework and Lab 4 are due 2/11, 11:00PM Central Time)</td>
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<td>Week 6: Feb. 12 - 18</td>
<td><strong>Topics:</strong> Nutrition and Digestion  &lt;br&gt;<strong>Readings:</strong> Chapter 21  &lt;br&gt;<strong>Lab 5:</strong> Ph.I.L.S. Lab #41 Digestion  &lt;br&gt;<strong>Homework Activities:</strong> Activities for Chapter 21 in MB  &lt;br&gt;(Chapter 21 Homework and Lab 5 are due 2/18, 11:00PM Central Time)</td>
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<tr>
<td>Week 7: Feb. 19 - 25</td>
<td><strong>Topics:</strong> Gas Exchange  &lt;br&gt;<strong>Readings:</strong> 22  &lt;br&gt;<strong>Lab 6:</strong> Ph.I.L.S. Lab #s 37, 38, 39 Respiration  &lt;br&gt;<strong>Homework Activities:</strong> Activities for Chapter 22 in MB  &lt;br&gt;(Chapter 22 Homework and Lab 6 are due 2/25, 11:00PM Central Time)</td>
</tr>
<tr>
<td>Week 8: Feb. 26 - Mar. 4</td>
<td><strong>Topics:</strong> Circulation; Temperature and Water Balance  &lt;br&gt;<strong>Readings:</strong> Chapters 23 and 25  &lt;br&gt;<strong>Lab 7:</strong> Ph.I.L.S. Lab #s 25 and 26 ECG and Heart Function  &lt;br&gt;<strong>Homework Activities:</strong> Activities for Chapter 23 and 25 in MB  &lt;br&gt;(Chapter 23 and 25 Homework and Lab 7 are due 3/4, 11:00PM Central Time)  &lt;br&gt;<strong>Exam: Arrange to take your proctored exam sometime the week after next (see below).</strong></td>
</tr>
</tbody>
</table>

No Classes or labs Spring Break is March 3 – 11
<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Break is March 3 – 11</strong></td>
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</tr>
<tr>
<td><strong>Unit 3 – Animal Form and Function 2</strong></td>
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</tbody>
</table>
| Week 9: Mar. 12 - 18 | **Exam 2 covering chapters 20 – 23 and 25 will be online for the week beginning at 8:00am Monday Mar. 12. The exam will go offline Friday, Mar. 16 at 11:00pm.**  
Topics: Hormones and the Endocrine System  
Readings: Chapter 26  
Lab 8: Ph.I.L.S. Lab #s 19 and 20 Endocrine Function  
Homework Activities: Activities for Chapter 26 in MB  
(Chapter 26 Homework and Lab 8 are due 3/18, 11:00PM Central Time) | |
| Week 10: March 19 - 25 | Topics: Nervous System  
Readings: Chapter 28  
Lab 9: Ph.I.L.S. Lab #s 12 and 13 Action Potentials  
Homework Activities: Activities for Chapter 28 in MB  
(Chapter 28 Homework and Lab 9 are due 3/25, 11:00PM Central Time) | |
| Week 11: March 26 – Apr 1 | Topics: The Senses  
Readings: Chapter 29  
Lab 10: Lab #s 14 and 15 Action Potentials  
Homework Activities: Activities for Chapter 29 in MB  
(Chapter 29 Homework and Lab 10 are due 4/1, 11:00PM Central Time) | |
| Week 12: Apr. 2 - 8 | Topics: Animal Movement  
Readings: Chapter 30  
Lab 11: Ph.I.L.S. Lab #s 5, 6 and 9 Skeletal Muscle Function  
Homework Activities: Activities for Chapter 30 in MB  
(Chapter 30 Homework and Lab 11 are due 4/8, 11:00PM Central Time)  
Exam: Arrange to take your proctored exam sometime next week (see below) | |
| **Unit 4 – Ecology** | | |
| Week 13: Apr. 9 - 15 | **Exam 3 covering chapters 26, 28 - 30 will be online for the week beginning at Monday, 8:00am Apr. 9. The exam will go offline Friday, Apr. 13 at 11:00pm.**  
Topics: Introduction to Earth’s diverse Environments  
Readings: Chapter 34  
Pre Lab: Ecological Footprint assignment; Conservation -Endangered Species Assignment in D2L  
Homework Activities: Activities for Chapter 34 in MB  
(Chapter 19 Homework is due 4/15, 11:00PM Central Time) | |
| Week 14: Apr 16 - 22 | Topics: Population Ecology and Communities & Ecosystems  
Readings: Chapters 36 and 37  
Lab 12: Ecological Footprint Lab report due  
Homework Activities: Activities for Chapters 36 and 37 in MB  
(Chapter 36 and 37 Homework and Lab 12 are due 4/22, 11:00PM Central Time) | |
| Week 15: Apr. 23 - 29 | Topics: Conservation Biology  
Readings: Chapter 38  
Lab 13: D2L Discussion Board: Conservation - Endangered Species  
Homework Activities: Activities for Chapter 38 in MB  
(Chapter 38 Homework and Lab 13 are due 4/29, 11:00PM Central Time)  
Exam: Arrange to take your proctored exam sometime during finals. | |
| **Finals week Apr 30 – May 4** | **The proctored final exam covering chapters 34, 36 - 38 will be available online Monday, Apr. 30, 8:00am to Friday, May 4, 5:00pm** | |