The Southeastern Dual Enrollment Biology courses provide high school students the opportunity to take college biology courses at their high schools and receive credit on their high school and Southeastern transcripts. Southeastern is offering a progressive pair of courses in Biology during the 2020-2021 academic year. Either course can be facilitated in a year-long format or in a semester-longer-long format.

**GBIO 151: General Biology I.** Credit 3 hours. Prerequisites: Math ACT ≥ 19; English ACT ≥ 18. Principles of biology from the cellular level including biochemistry, cell biology, metabolism, photosynthesis, molecular biology, and genetics.

**GBIO 153: General Biology II.** Credit 3 hours. Prerequisite: Completion of GBIO 151 with a “C” or better. A systematic study of the structure, function, evolution, ecology and relationships of organisms including viruses, bacteria, protists, fungi, plants, and animals.

### Program Requirements

**From the High School:**
- A computer lab must be available to all Dual Enrollment classes a minimum of one time per week. This can be a hard-wired classroom or a wireless cart.

**From the Facilitator:**
- Any facilitator new to the program must complete the corresponding workshop during the summer at Southeastern's main campus in Hammond.
- Any facilitator already in our program who would like to participate in a new class must complete the workshop for that new class during the summer at Southeastern’s main campus.
- All facilitators (new and returning) must attend a ½ day workshop at the end of the summer to copy all online course materials and receive any revisions to the Student Eligibility Guidelines.
- The facilitator(s) must ensure that their students meet the program requirements as outlined in the Dual Enrollment Student Eligibility Guidelines (website) and follow the guidelines of the program laid out in the Memorandum of Understanding (copy given to the principal).
- The facilitator must be certified in the discipline of the course they wish to facilitate.

**From the Students:**
- Students must be in the 11th or 12th grade.
- Have a high school cumulative GPA ≥ 2.5 (transcript must be provided).
- Students must have a Pre-ACT or ACT composite score of ≥19 (ASPIRE ≥ 430)
- Students must have a PLAN, Pre-ACT or ACT English sub-score of ≥18 (ASPIRE ≥ 433) **AND** a PLAN, Pre-ACT or ACT mathematics sub-score of ≥19 (ASPIRE ≥ 431) to enroll in a Biology course.
- Please note that if the ACT is taken in the 10th or higher grade, the ACT scores MUST be used for eligibility.
- To enroll in GBIO 153, the student must have successfully completed GBIO 151 with a ‘C’ or better.

### 2020 Summer Workshops:

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<tr>
<th>Session Title</th>
<th>Dates</th>
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<tr>
<td>New Facilitator / General BIOLOGY I (GBIO 151)</td>
<td>June 2-3, 2020 9:30-3:30</td>
<td>Mandatory for all new Dual Enrollment Biology facilitators</td>
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<td>New Facilitator / General BIOLOGY II (GBIO 153)</td>
<td>June 4, 2020 9:30-3:30</td>
<td>Mandatory for all new Dual Enrollment Biology facilitators</td>
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<tr>
<td>½ Day Workshop</td>
<td>July 20, 2020 9:00-noon</td>
<td>Mandatory for all Dual Enrollment Biology facilitators</td>
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Note:
Once a facilitator has completed the workshop for a particular course, he or she does not have to repeat that workshop in subsequent summers, unless he or she has not taught the course in the past 2 years. The only mandatory workshop for a returning facilitator, who does not wish to facilitate a new course, is a ½ day workshop in July. This ½ day workshop must be repeated each summer.

Southeastern’s Dual Enrollment Program webpage: [http://www.southeastern.edu/future_students/dual_enrollment/](http://www.southeastern.edu/future_students/dual_enrollment/)
GBIO 151-General Biology I
Southeastern Louisiana University Dual Enrollment 2019-2020 Academic Year

Instructor of Record: Rosemary Becker
Email: rosemary.becker@southeastern.edu
Phone: 985-549-5296

Course materials: http://moodlede.southeastern.edu

Prerequisite: Must be eligible to enroll in ENGL 101 and MATH 161 (see additional information above).

**GBIO 151 is a hybrid course with all content delivered online through MoodleDE OR face-to-face by Southeastern faculty. The Southeastern instructor of record will develop course content and provide powerpoint notes, ungraded instructional assignments, ungraded quizzes that are similar to exams, and exam study guides to help prepare students to complete the graded assignments and the exams which are also provided by the Southeastern instructor of record. The high school teachers will act as a facilitator and assist with student registration and enrollment, proctor exams as necessary, and through supplemental instruction, serve as a daily learning resource for students as they assimilate course content. The students' final course grades are assigned by the instructor of record.**

**Mastering (by Pearson) is the companion site to our textbook**

The Southeastern Instructor of Record will provide detailed instructor notes, PowerPoints, worksheets and outlines that act as study guides, and additional optional activities to the course facilitator through a facilitator only MoodleDE site. The Southeastern Instructor of Record will provide outlines and worksheets that act as study guides through MoodleDE. Through Mastering facilitators and students will have access to assignments and chapter checkouts, which count toward the course grade, as well as additional study material and practice activities.

**Student Learning Outcomes:** After the completion of this course, students will be able to:
- Describe elements, atoms, chemical bonds, and molecules important to life;
- Identify structures and functions of prokaryotic and eukaryotic cells;
- Describe the make-up of the cell membrane and how various molecules may cross it;
- Discuss the flow of energy and electrons in two major metabolic pathways: cellular respiration and photosynthesis;
- Describe the cell cycle and compare mitosis and meiosis;
- Relate meiosis and sexual reproduction to genes, chromosomes, inheritance, and human genetics;
- Describe DNA structure and its replication;
- Discuss steps of transcription, translation, and the regulation of gene expression;
- Describe and apply various DNA technologies.

**Exams:** There will be five 100-point exams including a final exam. Only the four highest exam grades will be used to calculate your final grade. The first four exams will cover material from the each unit of the course. The final exam is comprehensive and will cover the entire course. Exams will be administered via MoodleDE and grades will be posted on MoodleDE. There will be 400 total points from exams.

**Assignments and Chapter Checkouts:** Assignments worth up to 10 points will be given at the instructor of record’s discretion. Assignments are designed to test your understanding of material that has been presented. There is a Chapter Checkout for every chapter. You are required to complete these by the date of the respective exam. Assignments and Chapter Checkouts are available in Mastering via MoodleDE. There are approximately 190 points in Assignments.

**Grade scale:** [90-100% = A] [ 80-89% = B] [ 70-79% = C] [ 60-69% = D] [ < 60% = F]
Grades will be posted on MoodleDE at the completion of the unit. The Instructor of record will report final grades in LeoNet.

**Make-ups:** There will be no individual make-up exams given to students without a valid excuse. Students that possess a valid medical excuse or school excuse may be allowed to take a make-up exam (alternative assessment methods maybe used at my discretion). **Make-ups will only be allowed within 1 week of the excused absence.** There will be no make-ups for in class work and no extensions for outside class assignments without valid excuses or prior consent of the instructor. (You get to drop your lowest exam).
Academic Dishonesty: Schools agree that the first incident of academic dishonesty in any course by any student in any manner will result in a grade of 0 on the assessment in question. The second incident will result in the student’s failing the Southeastern portion of the course. Southeastern’s Academic Dishonesty Policy:

Students are expected to maintain the highest standards of academic integrity. Behavior that violates these standards is not acceptable. Examples are the use of unauthorized material, communication with fellow students during an examination, attempting to benefit from the work of another student and similar behavior that defeats the intent of an examination or other class work. Cheating on examinations, plagiarism, improper acknowledgement of sources in essays, and the use of a single essay or paper in more than one course without permission are considered very serious offenses and shall be grounds for disciplinary action as outlined in the current General Catalogue of Southeastern Louisiana University

http://www.southeastern.edu/resources/policies/policy_detail/acad_integrity.html

Attendance: Students should refer to the University policy on attendance as stated in the current SLU catalogue. Attendance will be taken at the beginning of each class. If you cannot attend lectures regularly, you should consider dropping the class. It is your responsibility to complete and file drop forms with you high school course coordinator if you wish to withdraw from the class. The last day to withdraw from the class for Fall semester classes is Friday, October 30th, 2020 and for Year-long and Spring semester classes is March 26th, 2021.

Grade Appeals: Should a student have a concern about a final grade posted for a dual enrollment course, the Grade Appeals policy should be followed below. Please note that a student has 30 days to make a written appeal to the Southeastern Instructor of Record:

After a final course grade is recorded in the Records and Registration Office, a change of grade must be approved in sequence by the instructor of record, the instructor’s department head, and the academic dean of the College of Science and Technology. In the event of a contested final course grade, a student’s written appeal of the grade must be submitted to the instructor within thirty (30) calendar days of final grades for the term being due. The grade appeal should also be submitted to Dr. Jeffrey Temple, Assistant Vice President for Academic Programs. For more information about grade appeals, see

http://www.southeastern.edu/resources/policies/policy_detail/instruction_practices.html

Material to be covered on exams given through MoodleDE:

Exam I Material:
- Chapter 1: Introduction: Evolution and the Foundations of Biology
- Chapter 2: The Chemical Context of Life
- Chapter 3: Carbon and the Molecular Diversity of Life
- Chapter 4: A Tour of the Cell

Exam II Material:
- Chapter 5: Membrane Transport and Cell Signaling
- Chapter 6: An Introduction to Metabolism
- Chapter 7: Cellular Respiration and Fermentation
- Chapter 8: Photosynthesis

Exam III Material:
- Chapter 9: The Cell Cycle
- Chapter 10: Meiosis and Sexual Life Cycles
- Chapter 11: Mendel and the Gene Idea
- Chapter 12: The Chromosomal Basis of Inheritance

Exam IV Material:
- Chapter 13: The Molecular Basis of Inheritance
- Chapter 14: Gene Expression: From Gene to Protein
- Chapter 15: Regulation of Gene Expression
- Chapter 16: Development, Stem Cells, and Cancer

Final Exam Material:
- Chapters 1-16
Important dates for the semester:
http://www.southeastern.edu/future_students/dual_enrollment/calendar/index.html

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GBIO 153-General Biology II
Southeastern Louisiana University Dual Enrollment 2020-2021 Academic Year

Instructor of Record: Rosemary Becker
Email: rosemary.becker@southeastern.edu
Phone: 985-549-5296

Course materials: http://moodlede.southeastern.edu

Prerequisite: Completion of GBIO 151 with a “C” or better.

GBIO 153 is a hybrid course with all content delivered online through MoodleDE OR face-to-face by Southeastern faculty. The Southeastern instructor of record will develop course content and provide powerpoint notes, ungraded instructional assignments, ungraded quizzes that are similar to exams, and exam study guides to help prepare students to complete the graded assignments and the exams which are also provided by the Southeastern instructor of record. The high school teachers will act as a facilitator and assist with student registration and enrollment, proctor exams as necessary, and through supplemental instruction, serve as a daily learning resource for students as they assimilate course content. The students' final course grades are assigned by the instructor of record.

Mastering (by Pearson) is the companion site to our textbook

The Southeastern Instructor of Record will provide detailed instructor notes, PowerPoints, worksheets and outlines that act as study guides, and additional optional activities to the course facilitator through a facilitator only MoodleDE site. The Southeastern Instructor of Record will provide worksheets, lecture slides, and outlines that act as study guides through MoodleDE. Through Mastering facilitators and students will have access to assignments and chapter checkouts, which count toward the course grade, as well as additional study material and practice activities.

Student Learning Outcomes: After the completion of this course, students will be able to:
- Explain microevolution, macroevolution, and speciation;
- Explain evolutionary relationships shown on a phylogenetic tree;
- Describe the molecules and conditions necessary for the origin of cells/life;
- Discuss major evolutionary events in the origin of life;
- Explain structures and characteristics used to classify and define major taxa including: viruses, bacteria, achaea, protists, plants, fungi, and animals;
- Describe the biodiversity crisis and practical strategies for conservation;
- Study in detail one major animal organ system and present findings to peers.

Exams: There will be four 100-point exams. Exams will be administered via MoodleDE and grades will be posted in MoodleDE. There will be 400 total points from exams.

Assignments and Chapter Checkouts: Assignments worth up to 10 points (except the Animal Phyla Assignment is 25) will be given at the instructor of record’s discretion. Assignments are designed to test your understanding of material that has been presented. Assignments are available in Mastering via MoodleDE or submitted through MoodleDE. There is a Chapter Checkout for every chapter. You are required to complete these by the date of the respective exam. There are approximately 189 points in Assignments and Chapter Checkouts.

Final Project: You will complete a project for an “Animal Structure and Function” chapter (Chapters 32-39) that includes a chapter summary and oral presentation of one core concept. This will be worth 100 points.

Grade scale: [90-100% = A ] [ 80-89% = B] [ 70-79% = C] [ 60-69% = D] [ < 60% = F]
Grades will be posted on MoodleDE at the completion of the unit. The Instructor of record will report final grades in LeoNet.

Make-ups: There will be no individual make-up exams given to students without a valid excuse. Students that possess a valid medical excuse or school excuse may be allowed to take a make-up exam (alternative assessment methods may be used at my discretion). Make-ups will only be allowed within 1 week of the excused absence. There will be no make-ups for in class work and no extensions for outside class assignments without valid excuses or prior consent of the instructor.
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Material to be covered on exams given through MoodleDE:

Exam I Material:
Chapter 19: Descent with Modification
Chapter 20: Phylogeny
Chapter 21: The Evolution of Populations
Chapter 22: The Origin of Species
Chapter 23: Broad Patterns of Evolution

Exam II Material:
Chapter 24: Early Life and the Diversification of Prokaryotes
Chapter 17: Viruses
Chapter 25: The Origin and Diversification of Eukaryotes

Exam III Material:
Chapter 26: The Colonization of Land
Chapter 28: Vascular Structure and Plant Growth
Chapter 29: Resource Acquisition, Nutrition, and Transport in Vascular Plants
Chapter 30: Reproduction and Domestication of Flowering Plants

Exam IV Material:
Chapter 27: The Rise of Animal Diversity
Chapter 43: Conservation Biology and Global Change

Animal Structure and Function (Final) Project
Chapter Outlines and Presentations: Chapters 32-39.
Important dates for the semester:
http://www.southeastern.edu/future_students/dual_enrollment/calendar/index.html

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