ROBERT S. WELCH CENTER FOR GRADUATE AND PROFESSIONAL STUDIES
GOUCHER COLLEGE
TEACHERS' INSTITUTE

SYLLABUS

Preparing Students for Advanced Placement Biology
AP 503.100 June 22 to 25, 2020

This course is designed both for teachers who are new to teaching AP Biology as well as for experienced teachers, who are looking for information about the redesigned course requirements. This course will focus on three areas essential to the teaching of the revised AP Biology course: 1) the Curriculum Framework (the four "Big Ideas", Enduring Understandings, Essential Knowledge and the seven "Science Practices"), 2) the inquiry-based lab approach, and 3) the exam. Participants will engage in extensive hands-on experiences with inquiry-based labs and will explore ways to modify existing labs to fit the AP Biology Science Practice Standards. The new exam design, particularly in contrast with the former exam, will be highlighted. Other topics of the week include the audit process, textbooks, and resources. Participants will be expected to read the new AP Biology curriculum before the workshop begins https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-biology-course-and-exam-description.pdf

Each participant briefly will share a "best practice" idea during the week. Participants should bring a laptop computer or tablet device with them. All laboratory equipment and other materials will be provided. Participants new to AP Biology, who are taking this course for graduate credit at Goucher College, will develop a course syllabus based on the new curriculum standards. (Teachers who already have successfully submitted an AP Biology syllabus for audit will develop a unit based around the new curriculum).

Instructor: Erol Altug
The Stony Brook School
Stony Brook, NY 11790
bioguyerol@gmail.com

COURSE REQUIREMENTS: (Please do the following BEFORE the class begins)

1. Please go to Advances in AP College Board website http://media.collegeboard.com/digitalServices/pdf/ap/10b_2727_AP_Biology_CF_WEB_110128.pdf
   and read the following documents: The AP Biology Curriculum Framework, AP Biology: An Overview of Course Revisions, AP Biology Investigative Labs: An Overview, and the New AP Biology Lab Manual (available online in February 2012).

2. Prepare a "best practices" sample lesson to share. Please be prepared to give a five-minute presentation of a lesson that works well for you. This can be a lab, an assignment, an activity, an approach to a topic, etc. Please note that it does not have to be at the AP level. Please bring digital copies of any handouts, if possible.

3. Please bring a laptop or notebook computer if you have one.

4. Please bring your school's calendar for the 2020-2021 academic year.

COURSE OBJECTIVES*:

In this course students will:

1. Become familiar with the AP Biology curriculum standards and develop a course syllabus that reflects these new standards. (Alternatively, for experienced teachers that have already developed their syllabus for the new AP Biology program, they will develop a unit of the curriculum.)

2. Get hands-on experience with a variety of laboratories.

3. Learn how to modify their existing lab program to reflect the new emphasis on a more open-ended, inquiry-based approach.

4. Become familiar with the new AP Biology Exam format.

5. Network with other teachers and share "best practice" lessons.

* (Please note that the AP Teacher Standards: Content Knowledge, Teacher Certification, Pedagogy, Analysis and Reflection, and Professional Development, are addressed in these objectives.)

Goucher College – Graduate Programs in Education Outcomes:

- GPE013 Dispositions- Professionalism and GPE009 Skills-Communication: Establish collaboration and co-operation among teachers.
- GPE002 Knowledge-Assessments, GPE009 Skills-Communication, and GPE6 Skills-Data: Familiarize high school teachers with skills and concepts tested on the AP Biology exam.
- GPE013Dispositions- Professionalism: Recognize and honor the significance of the roles that all high school AP Biology teachers play in the preparing of their students for academic success in advanced courses.

- GPE012 Dispositions-Diversity: GPE004 Knowledge- Diversity: Recognize that the AP Biology course is not restricted to an elite, subset of the school population, but is accessible to an equitable representation of the school body.
- GPE001 Knowledge- Theory, GPE003 Knowledge- Purpose: and GPE005 Skills-Theory: Help high school teachers to identify and practice effective strategies that help engage all their students in active, higher-level learning and to develop skills, knowledge, concepts, and habits of mind that support such rigor.
- GPE012 Dispositions-Professionalism: Learn strategies of how to work effectively as a team.
- GPE013 Dispositions-Professionalism: Create an Action Plan: prioritize team goals; assign responsibility; create a time line.
- GPE013 Dispositions-Professionalism: Collaborate and co-ordinate team efforts to form and maintain a cohesive program.

REQUIREMENTS FOR GRADUATE CREDIT

Requirements for Graduate Credit Include:

- Daily class attendance.
- Enthusiastic participation in all class activities.
- Answering one AP Free Response Question for a Mock-grading exercise.
- Completing one AP Practice Exam.
- Sharing one "Sample Lesson" (Best Practice) with the class. (5 Minute Presentation).
- Being prepared for all lab work (read labs in advance).
- Developing an Audit-ready Syllabus[1] for the new AP Biology curriculum

Final Evaluations will be based on:

- Completion of Audit-ready Syllabus or Developed Unit (Syllabi or Units are to be emailed to the instructor, Erol Altug, at bioguyerol@gmail.com within one week of the end of the course.)
- Participation in all hands-on activities and small group work.
- Oral presentations of "best practice" and Syllabus or Unit.
- Completion of work outside of class (lab prep, test questions, and reading).

If you are taking the course for credit, no absences are permitted. You must attend all five days and every session to receive graduate credit.

Grade and Transcript Information

Goucher College does not issue grade reports. You can obtain your grade approximately 3 weeks after concluding the course by going to the myGoucher website (myGoucher) and following the prompts to receive your grade. If you have misplaced your password, please contact the help desk (helpdesk@goucher.edu) and they will help you through this procedure.

If you need a paper copy of grades for tuition reimbursement, you will need to request a transcript in writing. You can fax your request to Student Administrative Services (SAS) at 410-337-6504 or mail to SAS at:

Goucher College, SAS
1021 Dulaney Valley Road
Baltimore, MD 21204

There is no charge for this request. Please allow 3-5 working days to process. To access the transcript request form, please go to http://www.goucher.edu/x1891.xml

Questions? Please call 410-337-6200.

Goucher APSI Biology Workshop ***June 22 – 25, 2020***

	Monday	**Tuesday**	**Wednesday**	**Thursday**
Key Takeaways	**Understanding the Course**	**Planning the Course**	**Teaching the Course**	**Assessing Progress and Understanding**
7:30-9:30	Welcome/Intros College Board/ETS/AP 1 *Science Practices* *Teaching for Transfer*	8 Using *the Topic Pages* 9 *Scaffolding & Spiraling Practices*	20 **BI 2** *AP #6* *Cellular Respiration* 14 SP **2** *Visual Representations*	22 AP *Exam Structure* 23 Formative *vs Summative Assessments* Writing FRQ's
9:30-11:30	2 *Content & Skills* *Teaching for Understanding* 3 *Understanding Course Framework*	**BI 1** *AP #2 scaffold Hardy-Weinberg* 10 *Course Planning* Levels of Inquiry *Polar Bear Dilemma*	15 **SP 3** *Question & Method* 16 SP **4** *Representing & Describing Data* 17 SP **5** *Statistical & Data Analysis* X^2 Dice	"The Read" CR, TLs *24 Scoring FRQ's* **BI 3** *AP # 7* *Mitosis & Meiosis* Modifying Labs
11:30-12:30	***L***	***U***	***N***	***C***
12:30-2:00	*Participant Sharing* 4 *Understanding the Big Ideas* 5 Exploring *the Unit Guides*	*Participant Sharing* 11 *Reviewing the Instructional Approaches*	*Participant Sharing* 25 **BI 3** *AP # 8* *DNA Transformation* 18 SP **6 Argumentation**	*Participant Sharing* Paper Plasmid 26 Thinking *Ahead: Curricular Requirements*
				Joining AP…
2:00-4:00 E^2I^2	6 *Lab Exercise #1* **BI 4** *AP #11* *Enzymes* 7 Thinking*: Strategies for Specific Topics*	12 *Lab Exercise #2* **BI 2** *AP#4* *Diffusion & Osmosis* 13 Thinking*: Strategies for Science Practices*	19 SP **1** *Concept Application* 21 Thinking *Ahead: Connecting Exam…*	27 Audit/*Curricular Requirements* 29 Next *Step - Join* Wrap-Up & Q/A
HW	7	13	21	