Syllabus

AP 566.300 Preparing Students for Advanced Placement® Statistics

This course will focus in detail on the philosophy, content, and pedagogies related to creating and implementing a successful course in AP Statistics. The sessions will engage participants in the four main areas of AP Statistics: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. The approach will be one of using actual AP Statistics’ problems to guide discussion of content and pedagogy. In addition, the course will provide opportunities for discussion about topics such as AP course goals, objectives, content, resources, bibliographies, and equipment; AP exam development and grading processes; syllabi, lesson plans, and assignments; how to refresh and improve existing AP courses; recent changes in AP course descriptions; strategies for teaching students at beginning or intermediate levels; vertical teaming; and use of technology in AP Statistics.

Instructor: Dr. Jim Bohan, Ed.D
bohan.educ@gmail.com– please state “Goucher AP Stats” in subject line

Summer 2019

<table>
<thead>
<tr>
<th>Tentative Schedule</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introductions Expectations</td>
<td>Feedback Questions</td>
<td>Feedback Questions</td>
<td>Feedback Questions</td>
<td>Feedback Questions</td>
</tr>
<tr>
<td>AM</td>
<td>Design and Sampling</td>
<td>Probability</td>
<td>Inference – Concepts</td>
<td>Inference – Significance Tests</td>
<td>The 2019 Test</td>
</tr>
<tr>
<td>PM</td>
<td>Descriptive Statistics</td>
<td>Probability</td>
<td>Inference – Confidence Intervals</td>
<td>Inference – Significance Tests</td>
<td></td>
</tr>
</tbody>
</table>

No text is required but participants are strongly recommended to bring whatever text they will be using when they teach AP Statistics.
Course Objectives:
- Develop deep understanding of the contents of AP Statistics;
- Increase the facility to make the concepts and procedures of AP Statistics more accessible to students;
- Increase proficiency with a variety of technological tools for statistical inquiry;
- Become proficient in the demand of and the methods of preparation for the AP Statistics Exam.
- Develop a network of colleagues with whom to collaborate in the teaching of AP Statistics.

Graduate Programs in Education (GPE) Outcomes:
- GPE001: Knowledge - Theory: Apply knowledge of psychological and educational theory, research, and/or philosophy related to the area of specialization or certification.
- GPE002: Knowledge - Assessments: Demonstrate understanding and use of the types of assessments appropriate to the area of specialization or certification.
- GPE005: Skills - Theory: Demonstrate the ability to incorporate theory and research into practice related to the area of specialization.
- GPE006: Skills - Data: Demonstrate the ability to gather appropriate data and use data in problem analysis and decision-making related to the area of specialization.
- GPE007: Skills - Problem Solving: Use problem solving/critical thinking strategies appropriate to the area of specialization.
- GPE008: Skills - Reflection: Use reflective practice within the area of specialization.
- GPE009: Skills - Communication: Demonstrate effective communication and presentation skills related to the area of specialization.
- GPE010: Skills - Technology: Use a variety of technologies appropriate for working in the area of specialization.
- GPE012: Dispositions - Diversity: Demonstrate positive dispositions toward diversity and equity.
- GPE013: Dispositions - Professionalism: Demonstrate professionalism in one’s demeanor, behavior, conduct, decision-making, and interactions with colleagues.

Bibliographical references and complimentary text books will be shared in class. Please plan to share activities, websites, and strategies during the institute. All submissions will be compiled and distributed to all.
Requirements for Graduate Credit – all documents must be submitted electronically at the end of the institute or within two weeks of the completion of the institute. Use the email address listed above.

- Completion of Essential Concepts Outline of the Four Sections of AP Statistics
- Creation of an action plan for implementation of concepts and procedures learned from the course.
- Evaluation of the course.
  - What did you like?
  - What did you not like?
  - What should I do differently?

If you are taking the course for credit, no absences are permitted. You must attend full time on all five days to receive graduate credit.

Instructions to receive a copy of Credits Earned after the completion of the course:

Goucher College does not issue grade reports. You can obtain your grade approximately 3 weeks after concluding the course by going to the GoucherLearn website (http://learn.goucher.edu/) and follow the prompts to receive your grade. If you have misplaced your password, please contact the help desk and they will walk you through this procedure (410-337-6322).

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