NOTE to prospective students: This syllabus is intended to provide students who are considering taking this course an idea of what they will be learning. A more detailed syllabus will be available on the course site for enrolled students and may be more current than this sample syllabus. Summer term courses may be accelerated – please check the Ecampus Schedule of Classes for more information.

H 220
Introduction to Health Data Analysis

COURSE CREDITS:
(3) This course combines approximately 90 hours of instruction, online activities, and assignments for 3 credits.

PREREQUISITES, CO-REQUISITES AND ENFORCED PREREQUISITES:
PREREQS: MTH 105 or MTH 111 or higher mathematics.

COURSE DESCRIPTION FROM CATALOG
Introduction to the application of biostatistics and probability to the health sciences. Topics include quantitative analysis and inference, statistical methods in the biosciences, and quantitative study to evaluate and control health problems.

CONTACT INFORMATION:
For more information, contact: SUNIL KHANA or SHERYL THORBURN, 401 WALD, 541-737-2686

Sample syllabi may not have the most up-to-date information. For accuracy, please check the ECampus Schedule of Classes to see the most current instructor information. You can search for contact information by name from the OSU Home Page.

LEARNING RESOURCES:
• Narrated lecture notes
• Reading assignments – These are usually from the required text and occasionally from other sources provided.
• Web-links and applets
• Interactive discussion forum – Students will engage in discussion on important course issues, including asking questions on problem sets. The discussion board will be monitored by the instructor.
• Problem sets – Assessments will be posted with each unit and are to be submitted through Canvas.

NOTE: For textbook accuracy, please always check the textbook list at the OSU Bookstore website. Sample syllabi may not have the most up-to-date information.

Students can also click the OSU Beaver Store link associated with the course information in the Ecampus schedule of classes for course textbook information and ordering.

COURSE SPECIFIC MEASURABLE STUDENT LEARNING OUTCOMES:
1) Use principles of descriptive and inferential statistics in Public Health.
2) Explain the importance of biostatistics in public health and medical research.
3) Apply statistical procedures in the public health environment.
4) Interpret statistical results, tables, and figures from the public health and medical literature.
5) Evaluate the methodological strength of published public health research on the basis of the appropriateness of statistical methods and the extent to which the results can be generalized.
6) Explain the difference between observational and experimental studies and recognize the strengths and weaknesses of reported studies.
7) Describe the limitations of basic statistical procedures and know when to apply them and know when not to.

Program Competencies:

Academic Program Competencies associated with the successful completion of this course can be viewed at: http://health.oregonstate.edu/degrees/competencies

EVALUATION OF STUDENT PERFORMANCE:

70% Problem sets; 30% Final examination
COURSE CONTENT AND POLICIES:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading Assignment</th>
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<tbody>
<tr>
<td>1.</td>
<td>Statistics Success Stories and Cautionary Tales</td>
<td>Chapter 1</td>
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<td></td>
<td>Sampling: surveys and how to ask questions</td>
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<td>2.</td>
<td>Study designs: Gathering Useful Data for Examining Relationships</td>
<td>Chapter 2</td>
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<td>3.</td>
<td>Assessing the Association Between Categorical Variables: Quantifying the Extent of Disease</td>
<td>Chapter 3</td>
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<td>4.</td>
<td>Turning Data into Information – Summarizing Data Collected in the Sample</td>
<td>Chapter 4</td>
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<td>5.</td>
<td>Probability</td>
<td>Chapter 5</td>
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<td></td>
<td>Random variables</td>
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<tr>
<td>6-8.</td>
<td>Sampling Distributions; Testing Hypotheses about Proportions; Estimating Proportions with Confidence</td>
<td>Chapters 6 &amp; 7</td>
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<tr>
<td>9 and 10.</td>
<td>Testing Hypotheses about Means; Estimating Means with Confidence; Important Ideas and Connections; Correlation and regression</td>
<td>Chapters 6 &amp; 7; Section 9.3</td>
</tr>
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Final Examination

COURSE SITE LOGIN INFORMATION
Information on how to login to your course site can be found [HERE](#).

STATEMENT REGARDING STUDENTS WITH DISABILITIES
Oregon State University is committed to student success; however, we do not require students to use accommodations nor will we provide them unless they are requested by the student. The student, as a legal adult, is responsible to request appropriate accommodations. The student must take the lead in applying to Disability Access Services (DAS) and submit requests for accommodations each term through DAS Online. OSU students apply to DAS and request accommodations at our [Getting Started with DAS](#) page.
Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

ACADEMIC INTEGRITY AND STUDENT CONDUCT (OSU POLICY)
Students are expected to be honest and ethical in their academic work. Intentional acts of academic dishonesty such as cheating or plagiarism may be penalized by imposing an “F” grade in the course.

Student conduct is governed by the universities policies, as explained in the Office of the Dean of Student Life: Student Conduct and Community Standards. In an academic community, students and faculty, and staff each have responsibility for maintaining an appropriate learning environment, whether online or in the classroom. Students, faculty, and staff have the responsibility to treat each other with understanding, dignity, and respect.

Students are expected to conduct themselves in the course (e.g. on discussion boards, email postings, etc.) in compliance with the university’s regulations regarding civility. Students will be expected to treat all others with the same respect as they would want afforded to themselves. Disrespectful behavior (such as harassing behavior, personal insults, inappropriate language) or disruptive behaviors are unacceptable and can result in sanctions as defined by Student Conduct and Community Standards.

For more info on these topics please see:
- Statement of Expectations for Student Conduct
- Student Conduct and Community Standards - Offenses
- Policy On Disruptive Behavior

PLAGIARISM
You are expected to submit your own work in all your assignments, postings to the discussion board, and other communications, and to clearly give credit to the work of others when you use it. Academic dishonesty will result in a grade of “F.”
- Statement of Expectations for Student Conduct
- Avoiding Academic Dishonesty

TECHNICAL ASSISTANCE
If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact the OSU Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the OSU Computer Helpdesk online.

**TUTORING**

For information about possible tutoring for this course, please visit our Ecampus NetTutor page. Other resources include:

- Writing Center
- Online Writing Lab

**STUDENT EVALUATION OF TEACHING**

We encourage you to engage in the course evaluation process each term – online, of course. The evaluation form will be available toward the end of each term, and you will be sent instructions through ONID. You will login to “Online Services/MyOSU” to respond to the online questionnaire. The results on the form are anonymous and are not tabulated until after grades are posted. Course evaluation results are very important and are used to help improve courses and the learning experience of future students. Results from questions are tabulated anonymously and go directly to instructors and unit heads/supervisors. Unless a comment is “signed,” which will associate a name with a comment, student comments on the open-ended questions are anonymous and forwarded to each instructor. “Signed” comments are forwarded to the unit head/supervisor.

**REFUND POLICY INFORMATION**

Please see the Ecampus website for policy information on refunds and late fees.