INTRODUCTION

The basic objectives of this course are to acquaint students with (1) basic statistics, (2) models and methods used in the analysis and projection of population and employment, and (3) the major data sources for such analyses, including data shortcomings and problems of comparability. The overall goal is to foster an awareness of the use of data and projection methodologies by planners, with an emphasis on translating results into policy implications that are understandable by the non-technical reader.

COURSE OBJECTIVES

- Develop skills to conduct basic statistical analysis
- Become familiar with data sources on employment and population, and be able to use this data for descriptive and analytical purposes.
- Gain an understanding of the basic techniques for the analysis of demographic and economic data.
- Acquire the ability to conduct data analysis and present the findings of these analysis using appropriate written language, charts, tables etc.
TEXT AND READINGS

The course relies on two text books. The book by Stock and Watson is available at the Closed Reserve Section of the Knowlton Library. The book by Wang and Hofe is available online.


Available at: http://www.springer.com/earth+sciences+and+geometry/geography/book/978-3-540-49658-8 (Please go to this web-page and click “Read online”. Then you can download the chapters. Please use the computers on campus while downloading the chapters.)

CLASS FORMAT

The class meets twice weekly for lectures, including in-class discussion. Some of the sessions will be devoted to problem solving and discussions. The class format is informal and students are encouraged to ask questions.

EXAM DATES

- Midterm exam March 4, during class hours
- Final exam April 24, 2pm to 3:45pm

GRADING

The final grade for the course is determined as follows:

- Homeworks 15 %
- Project 1 15 %
- Project 2 10 %
- Midterm 30 %
- Final exam 30 %

Homeworks

Homeworks are an important part of the course. They are designed to be applied and require a combination of modeling (spreadsheets, graphical analysis or calculations) and written analysis. They are given to help you grasp the class material. In addition, you may expect similar questions in exams.
Projects
There are two class projects required for this course. One of these projects will be related to demographic/population projections and one will be related to employment projections. You will work in groups of 4 (at most) for these projects.

Each group will choose an Ohio county as the study area for the two projects. Each county may be selected by only one group and we will assign them on a first come first served basis. More details will be given in each individual assignment. Please let Yu-Jen Chen (chen.1571@buckeyemail.osu.edu) know as soon as you have chosen your group and your county, no later than February 6th.

Names of the participating group members must appear on each project when it is turned in. If a group member does not participate in project work, please do not include his/her name on the project report. Detailed information regarding the format and presentation style for these projects will be provided. You will keep the same group throughout the semester. If you face problems with your group members; please do not wait until the end of the semester to inform the instructor or the TA.

Makeup Exam Policy
The dates of the midterm and the final exams are announced in this document. Please note these dates and make the necessary arrangements. No makeup exam will be given unless there is a medical emergency. You will need to provide proper documentation for these emergencies, and inform the instructor either before or within 48 hours of the exam to get the necessary approval. The report/ doctor’s note should clearly indicate that you are in a condition that prevents you from attending school, work and taking an exam.

There will not be separate makeup exams for the midterm and the final. Only one makeup exam will be given. This exam will be a comprehensive exam covering the whole course material, and will be scheduled to be during the finals week.

Please note that pre-scheduled doctor’s appointments (for instance, your annual checkup), job interviews, job related issues, family reunions do not count as emergencies or valid excuses.

Plagiarism will not be tolerated. Plagiarism is passing off as one’s own ideas, words, writings, etc., which belong to another. You are committing plagiarism if you copy the work of another person and turn it in as your own even if you should have the permission of that person. Any instances of academic misconduct will be reported to the Committee on Academic Misconduct (University Rule 3335-5-487). If you are unsure as to what constitutes plagiarism, please see your instructor.
ADA POLICY STATEMENT
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Office of Disability Services at (614) 292-3307. Additionally, contact the instructor as early as possible in the quarter, so your disability can be properly accommodated.

TENTATIVE COURSE OUTLINE(*)

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<tr>
<th>TOPIC</th>
<th>READINGS</th>
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<tbody>
<tr>
<td>1 week Introduction, descriptive statistics and some probability concepts</td>
<td>Stock and Watson, Chapters 1 and 2</td>
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<td>2 weeks Hypothesis testing</td>
<td>Stock and Watson, Chapter 3</td>
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<td>3 weeks Regression analysis</td>
<td>Stock and Watson, Chapters 4-6</td>
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<td>1 week Midterm</td>
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<td>2 weeks Introduction, extrapolation techniques, estimates, projections, forecasts, extrapolation curves. Understanding and working with the data.</td>
<td>Wang and Hofe, Ch. 3.4</td>
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<td>2 weeks Population projections with cohort component technique; mortality component, migration component and fertility component.</td>
<td>Wang and Hofe, Ch. 3.5</td>
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<td>2 weeks Employment projections: Assumption and location quotient approach Minimum requirements approach Constant share and shift share approaches Economic base projection model</td>
<td>Wang and Hofe, Ch 4.</td>
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<td>1 week Introduction to gravity model.</td>
<td>Notes will be provided.</td>
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*The number of weeks assigned for each topic is approximate.