

## HI ED 850

### Analyzing Faculty Workload, Performance and Compensation

**General Course Description:** (3 credits, Dr. Daniel Teodorescu, Instructor). This course provides researchers with the skills and the analytical issues associated with analyzing faculty workload and performance in teaching, scholarship, and outreach. Topics include an overview of needed local and existing national databases, measuring faculty workload, evaluating faculty research productivity, using student ratings of instruction, providing support for academic program reviews, conducting salary studies, addressing issues of equity/diversity, and assessing faculty satisfaction, turnover, and flow.

**Prerequisites:** Understanding but not mastery of intermediate statistics such as linear and logistic regression and use of SPSS.

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#### Overview

This course provides students with an overview of faculty issues and the most common analyses researchers carry out in the area of academic affairs. The course is designed for those entering careers in institutional research and planning, particularly those whose work supports the Provost, as well as for those whose work is related to faculty analysis and reporting in other higher education settings. This is one of the elective courses for the Penn State Certificate Program in Institutional Research, offered in collaboration with the Association for Institutional Research. Nevertheless, those students who are not enrolled in the Graduate Certificate in Institutional Research Program (<http://www.ed.psu.edu/cshe/ir.html>) but want to register for the course are welcome to do so.

This 12-week course is divided into the following nine topics:

1. Who are your faculty? Essential Demographic Analyses
2. Overview of National Databases for Faculty Studies
3. Measuring Instructional Workloads and Costs
4. Measuring Faculty Performance
5. Conducting Faculty Salary Analyses
6. Analytical Support for Equity and Diversity Studies
7. Faculty Flow Analysis: Recruitment, Promotion and Retention
8. Assessing Faculty Job Satisfaction
9. Using Data to Improve Faculty Development

Some of these topics cover more readings and require more time for completing assignments than others. For each topic, students will carryout one or more of the following:

- Read the listed selection of readings from the textbook and course pack, sometimes including audio materials.
- Conduct an exercise in order to answer questions posed by the instructor and to make a short report that will be posted on-line and discussed.

- Become familiar with one or two reports prepared by other students and participate in on-line discussions with instructor and students.
- Analyze and prepare reports from databases supplied by the instructor. Some of these will be self-paced, and others may involve teams of students in the course.

**Special Note:** All submissions should follow the principles of effective reporting that are covered in the 598I Foundations course. You should single space all submissions, not only for readability on the screen, but also for saving paper when printed.

## Course Objectives

Upon completion of this course, students will be able to:

- Understand concepts, methodologies, research practices, and information systems that support academic decision making in the Provost's Office
- Use NSOPF, IPEDS, and other national databases that collect faculty information
- Understand the diversity of faculty at national and institutional levels
- Recognize and carryout at a basic level the major Institutional Research faculty-related analyses including using benchmarking, projections, salary equity, instructional analysis, and research productivity.
- Develop appropriate metrics to gauge faculty work
- Utilize SPSS software, make PowerPoint presentations, and produce effective reports related to faculty issues.

## Required Textbooks

Knight, W. E., Ed. (2003). *Primer for institutional research*. Resources in Institutional Research (No. 14). Tallahassee, FL: Association for Institutional Research. ISBN 1-882393-10-4.

Carol L. Colbeck (2002). *Evaluating Faculty Performance*. New Directions for Institutional Research #114, Jossey-Bass. ISBN 0-7879-6334-8.

Robert K. Toutkoushian (2002). *Conducting Salary Equity Studies*. New Directions for Institutional Research #115, Jossey-Bass. ISBN 0-7879-6335-6.

Robert K. Toutkoushian (2003). *Unresolved Issues in Conducting Salary-Equity Studies*. New Directions for Institutional Research #117, Jossey-Bass. ISBN 0-7879-6863-3.

For pricing and ordering information, please see the MBS Direct Web site, located at <http://direct.mbsbooks.com/psude.htm>. MBS Direct can also be contacted at 1-800-325-3252.

Materials will be available at MBS Direct approximately three weeks before the course begins. When ordering your course materials, please pay close attention to the version number (01WC). It is very important that you purchase the correct materials. If your course requires one or more textbooks, you must have exactly the correct text required (edition and year).

## Using the Library

Many of Penn State's library resources can be utilized from a distance. Through the [Library Resources and Services for World Campus and Distance Education](#) Web site, you can...

- access electronic databases, and even full text articles, from the LIAS Fast Track,
- borrow materials and have them delivered to your doorstep...or even your desktop
- talk to reference librarians in real time using the "Virtual Reference Service"

...and much more!

NOTE: You must have an active Penn State Access Account and be registered with the University Libraries in order to take full advantage of the Libraries' resources and services. Registration and services are free!

## Technical Requirements

- [Recommended Browsers and Computers](#)
- [Test Your Computer](#) to see if it is set up correctly
- [Printing Tips](#)

If you need technical assistance at any point during the course, please contact the [World Campus Helpdesk](#).

## Course Requirements

This is a 12-week graduate level course, with a one week break for July 4th. Each week the cohort of students will spend one to three hours on-line viewing course materials and assignments, participating in online discussions, and communicating with the instructor. Each student should plan on spending 4-9 hours per week on course assignments including both online and offline readings and exercises. During the 12 weeks, there will be both individual tasks and team assignments. The instructor will make it possible, for those who need it, to take one or two weeks off during the summer, but we advise everyone to work ahead to guard against unanticipated illness, family emergencies, or job stress. Although the course offers considerable flexibility in the timing of student interactions, we believe that the learning will be enhanced by students moving through the course together, rather than independently.

## **Unit 1: Introduction to the Course: Overview of Faculty Related Analyses**

- Communication exercise
  - Introduction to topics
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## **Unit 2: Who are your faculty? Essential Demographic Analyses**

- Shifting demographics
- Shifting institutional types, fields, and appointments

### ***Required Readings (obtain by going to website provided):***

Cataldi, E.F., Fahimi, M., and Bradburn, E.M. (2005). 2004 National Study of Postsecondary Faculty (NSOPF:04) Report on Faculty and Instructional Staff in Fall 2003. Washington, DC: NCES. Available at: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005172>

### ***Required Readings from Electronic Reserve:***

Gappa, J.M., Austin, A.E., and Trice, A.G. (2007). Faculty appointments and faculty members: Diversification, Growth, and Diversity. Chapter 3 in “Rethinking faculty work: Higher education’s strategic imperative.” San Francisco: Jossey Bass.

Schuster, J. H. and Finkelstein, M.J. (2006). The Professoriate in Profile. Chapter 3 in “The American Faculty: The restructuring of academic work and careers.” Baltimore, MD: The Johns Hopkins University Press.

### ***Optional Readings (obtain by going to website provided):***

NCES (2007). Employees in Postsecondary Institutions, Fall 2005, and Salaries of Full-Time Instructional Faculty, 2005-06 [<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2007150>]

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## **Unit 3: Overview of National Databases for Faculty Studies (I)**

- IPEDS Human Resources
- Faculty Salary Surveys
- The National Study of Postsecondary Faculty (NSOPF)
- The National Study of Instructional Costs and Productivity
- WebCASPAR
- ISI University Science Indicators
- Top American Research Universities
- Academic Analytics
- NSF Survey of Earned Doctorates (SED)
- NSF Survey of Doctorate Recipients (SDR)

***Required Readings (obtain by going to website provided):***

Milam, J. (1999). Using the national datasets for faculty studies, *AIR Professional File No. 70*. Tallahassee, FL: The Association for Institutional Research.  
Available at: <http://www.airweb.org/page.asp?page=73&appage=85&id=70>

Phillippe, K., Sapp, M.. and Cohen, P. (2004). AIR Alert #20 Use of Perturbation in IPEDS Data, <http://www.airweb.org/?page=516>

***Required Readings from Textbook:***

Milam, J. (2003) Using National Datasets for Postsecondary Education Research. Chapter 3 in Knight, W. E. [Ed.], *The Primer for institutional research* (pp. 123-14947). Tallahassee, FL: Association for Institutional Research.

***Optional Readings and References:***

Gater, D. (2003) Using National Data in University Rankings and Comparisons, <http://mup.asu.edu/gaternatldata.pdf>

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**Unit 4: Overview of National Databases for Faculty Studies (II)**

- Accessing NCES Data: The IPEDS Data Center
- Accessing NSF Data: WebCASPAR and SESTAT

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**Unit 5: Measuring Instructional Workloads and Costs**

- How do faculty spend their time?
- Analyzing instructional workload data
- Analyzing instructional costs
- Benchmark analyses

***Required Readings from Textbook and Electronic Reserve:***

Middaugh, M. F. (2003). Describing Faculty Activity and Productivity for Multiple Audiences. Chapter 3 in Knight, W. E. [Ed.], *The Primer for institutional research* (pp. 24-46). Tallahassee, FL: Association for Institutional Research.

Schuster, J. H. and Finkelstein, M.J. (2006). The Changing Complexion of Faculty Work. Chapter 4 in *The American Faculty: The restructuring of academic work and careers*. Baltimore, MD: The Johns Hopkins University Press.

Summer, K.P. and Brewer, R.G (2006). Benchmarking Instructional Costs and Productivity: The Kansas Study. In *New Direction for Community Colleges*, 134, pp 5-13

## Unit 6: Measuring Faculty Performance

- Evaluating instruction
- Evaluating scholarship
- Evaluating service

### ***Required Readings from Texts and Electronic Reserve:***

Braxton, J.M. (2005). Analyzing faculty work and rewards, editor's notes. *New Directions for Institutional Research* (No. 129). San Francisco: Jossey-Bass. pp. 1-5.

Braxton, J.M. and Del Favero, M. (2002). Evaluating scholarship performance: Traditional and emergent assessment templates. In C. L. Colbeck, (Ed.), Evaluating faculty performance. *New Directions for Institutional Research* (No. 114). San Francisco: Jossey-Bass Inc., Publishers. pp. 19-31.

Amey, M.J. (2002). Evaluating outreach performance. In C. L. Colbeck, (Ed.), Evaluating faculty performance. *New Directions for Institutional Research* (No. 114). San Francisco: Jossey-Bass Inc., Publishers. pp. 33-42.

Colbeck, C. L. (2002). Integration: Evaluating faculty work as a whole. In C. L. Colbeck, (Ed.), Evaluating faculty performance. *New Directions for Institutional Research* (No. 114). San Francisco: Jossey-Bass Inc., Publishers. pp. 43-52.

Paulsen, M. (2002). Evaluating teaching performance. In C. L. Colbeck, (Ed.), Evaluating faculty performance. *New Directions for Institutional Research* (No. 114). San Francisco: Jossey-Bass Inc., Publishers. pp. 5-18.

### ***Optional Readings and References from Texts and Electronic Reserve:***

Abrami, P.C. (2001). Improving judgments about teaching effectiveness using teacher rating forms. In M. Theall, P.C. Abrami, and L.A. Mets (Eds.), *The Student Ratings Debate: Are They Valid? How Can We Best Use Them?* *New Directions for Institutional Research* (No. 109). San Francisco: Jossey-Bass Inc., Publishers. pp. 59-87.

Toutkoushian, R.K, S.R. Porter, C. Danielson, and P.R. Hollis. (2003). Using publications counts to measure an institution's research productivity. In *Research in Higher Education*, 44 (2), pp. 121-148.

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## Unit 7: Conducting Faculty Salary Analyses

- Competitiveness
- Compression
- Equity

### ***Required Readings from the Textbooks:***

Ferber, M. A., and Loeb, J. W. (2002). Issues in conducting an institutional salary-equity study. In R. K. Toutkoushian, (Ed.). *Conducting salary-equity studies: Alternative approaches to research. New Directions for Institutional Research* (No. 115). San Francisco: Jossey-Bass. pp. 41-70.

McLaughlin, G.W. & Howard, R. D. (2003). Faculty salary analyses. Chapter 4 in Knight, W. E. [Ed.] *The Primer for institutional research* (pp. 48-78). Tallahassee, FL: Association for Institutional Research.

McLaughlin, G.W., & and McLaughlin, J.S. (2003). Conducting a salary-equity study: A consultant's view. Chapter 5 in R. K. Toutkoushian, (Ed.), *Unresolved issues in conducting gender equity studies. New Directions for Institutional Research* (No. 117). San Francisco: Jossey-Bass. pp. 97-114.

Toutkoushian, R. K. & E.P. Hoffman (2002). Alternatives for measuring the unexplained wage gap. Chapter Three in R. K. Toutkoushian, (Ed.). *Conducting salary-equity studies: Alternative approaches to research. New Directions for Institutional Research* (No. 115). San Francisco: Jossey-Bass. pp. 71-89.

### ***Optional Readings and References from Textbooks, Electronic Reserves, and Web Links:***

Barbezat (2003). From here to seniority: The effect of experience and job tenure on faculty salaries. In R. K. Toutkoushian, (Ed.), *Unresolved issues in conducting gender equity studies. New Directions for Institutional Research* (No. 117). San Francisco: Jossey-Bass. pp. 21-48.

Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. *International Economic Review*, 14(3), pp 693-709.

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## Unit 8: Analytical Support for Equity and Diversity Studies

- Equity in representation in current ranks and hiring
- Equity in tenure promotion decisions and time in rank at the associate professor level
- Equity in access to leadership positions
- Equity in the allocation of workloads and access to university resources

### ***Required Readings (obtain by going to website provided):***

University of Pennsylvania Gender Equity Committee(2001). The gender equity report, executive dummmary, <http://www.upenn.edu/almanac/v48pdf/011204/GenderEquity.pdf>

Princeton University (2003). Report of the task force on the status of women faculty in the natural sciences and engineering at Princeton. <http://www.princeton.edu/pr/reports/sciencetf/sciencetf-9-19-03.pdf>

***Required Readings from Text and Electronic Reserve:***

Perna, L.W. (2001). Sex and race differences in faculty tenure and promotion. *Research in Higher Education*, 42 (5), pp. 541-567.

Becker, W.E. and Toutkoushian, R.K. Measuring gender bias in the salaries of tenured faculty members. Chapter 1 in R. K. Toutkoushian, (Ed.), Unresolved issues in conducting gender equity studies. *New Directions for Institutional Research* (No. 117). San Francisco: Jossey-Bass. pp. 5-20.

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**Unit 9: Faculty Flow Analysis: Recruitment, Promotion and Retention (I)**

- Describing and explaining faculty recruitment success
- Describing and explaining faculty retention

***Required Readings (obtain by going to website provided):***

The California State University (2006). Report on Faculty Recruitment Survey, <http://www.calstate.edu/HR/FacRecSurvRep05.pdf>

The California State University (2006). Report of the Faculty Flow Committee, [www.calstate.edu/AcadSen/Records/Reports/FacultyFlowCmtReport.pdf](http://www.calstate.edu/AcadSen/Records/Reports/FacultyFlowCmtReport.pdf)

***Required Readings from Electronic Reserve:***

Harrigan, M (1999). An Analysis of Faculty Turnover at the University of Wisconsin –Madison. Paper presented at the 39th Annual AIR Forum, May 30 – June 2, 1999 Seattle, Washington.

***Optional Readings and References:***

Conley, V.M (2004). Exploring faculty retirement Issues in public 2–year institutions. Presented at the annual meeting of the Association for Institutional Research, Boston, MA, May 30-June 2, 2004.

Zhou, Y. and Volkwein, F. (2004). Examining the influences on faculty departure intentions: A comparison of tenured and nontenured faculty at research universities using NSOPF-99. *Research in Higher Education*, 45(2), pp. 139- 176.

Johnsrud, L. K., and Rosser, V.(2002). Faculty members' morale and their intention to leave. *Journal of Higher Education*, 73(4), 518-542.

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**Unit 10: Faculty Flow Analysis: Recruitment, Promotion and Retention (II)**

- Analyzing Career Progression (Promotion and Tenure)

- Projecting Retirements
- Projecting Number of Hires, Salary Outlays, and Faculty Mix

***Required Readings (obtain by going to website provided):***

Huhn, C (2003). UW-Madison Faculty Retirement Patterns and Projections: Faculty Retirements from October 1990 through September 2002.  
[http://apa.wisc.edu/FacultyRetirement/FacultyRetirementProjections\\_2003.pdf](http://apa.wisc.edu/FacultyRetirement/FacultyRetirementProjections_2003.pdf)

Harrigan, M (1997). Faculty Retirement issues at UW-Madison,  
<http://apa.wisc.edu/facultyretirements.htm>

Kelly, W. (1998) Studying Faculty Flows Using an Interactive Spreadsheet Model. AIR Professional File, nr 69.  
 Available at: <http://www.airweb.org/page.asp?page=73&apppage=85&id=69>

***Required Readings from Electronic Reserve:***

Dooris, M.J., and Guidos M. Tenure achievement rates at research universities. Presentation at the Annual Forum of the Association for Institutional Research Chicago, Illinois May 2006

## **Unit 11: Assessing Faculty Job Satisfaction**

- Assessing Faculty Job Satisfaction
- Assessing the Need for Work-Life Policies
- Assessing the Success of Work-Life Policies

***Required Readings (obtain by going to website provided):***

The Provost's Advisory Committee on Faculty Work Life at Cornell University (2006). *Faculty work life study results*. [http://dpb.cornell.edu/IP\\_E\\_Faculty\\_Work\\_Life.htm](http://dpb.cornell.edu/IP_E_Faculty_Work_Life.htm)

***Required readings from Electronic Reserve:***

Ambrose, S. Huston, T., and Norman, M. (2005). A qualitative method for assessing faculty satisfaction, *Research in Higher Education*, 46(7): 803-830.

Hagedorn, L.S. (2000). Conceptualizing faculty job satisfaction: components, theories, and outcomes. Chapter 1 in *New Directions for Institutional Research*, #105, pp. 5-20.

Volkwein, J. Fredericks and Zhou, Ying (2003). Testing a model of administrative job satisfaction, *Research in Higher Education*, 44: 149-172.

Ward, K. & Wolf-Wendel, L.E. (2005). Work and family perspectives from research university faculty. Chapter 4 in *New Directions for Higher Education*, #130, pp. 67-80.

***Optional Readings and References:***

Lindholm, J.A., Szelenyi, K., Hurtado, S. & Korn, W.S. (2005). *The American college teacher: National norms for the 2004-05 HERI faculty survey*. Los Angeles: Higher Education Research

Institute, UCLA.

<http://www.gseis.ucla.edu/heri/PDFs/ACT-Research%20Brief.PDF>

Gappa, J. M., Astin, A.E., and Trice, A.G. (2007). *Rethinking faculty work: Higher education's strategic imperative*. San Francisco: Jossey Bass.

Gmelch, W., Wilke, P., and Lovrich, N. (1986). Dimensions of stress among university faculty members: Scope and depth of involvement. *Research in Higher Education*, 24, 266-286.

Hagedorn, L. S. (2000). What contributes to job satisfaction among faculty and staff. *New Directions for Institutional Research*, # 105. San Francisco

Volkwein, J.F. and Parmley, K. (2000). Comparing administrative satisfaction in public and private Universities, *Research in Higher Education*, 41: 95-115.

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## **Unit 12: Using Data to Improve Faculty Development**

- Assessing faculty development needs
- Evaluating faculty development programs

### ***Required Readings (obtain by going to website provided):***

Schmitz, C.C. (1998). Evaluating faculty development programs and publishing the results. presented at "Models that Work: The Nuts and Bolts of Faculty Development for General Internal Medicine, Family Medicine, and General Pediatrics" Conference, Orlando, Florida December 2-4, 1998. [[www.ambpeds.org/site/education/nutsandbolts/pdfs/schmitz.pdf](http://www.ambpeds.org/site/education/nutsandbolts/pdfs/schmitz.pdf)]

Western Illinois University Center for Innovation in Teaching and Research. (2008). Needs Assessment Survey. [[http://www.wiu.edu/citr/Needs\\_Assessment/](http://www.wiu.edu/citr/Needs_Assessment/)]

### ***Required Readings from Electronic Reserve:***

Stolzenberg, E.B. (2002). Sources and information: Professional development in community colleges. Chapter 11 in G.E. Watts (Ed.), *Enhancing Community Colleges Through Professional Development*. New Directions for Community Colleges, 120, pp.85-95.

### ***Optional Readings from Electronic Reserve:***

Alstete, J.W. (2000). Designing development programs for tenured faculty." In *Posttenure Faculty Development: Building a System for Faculty Improvement and Appreciation*. ASHE-ERIC Higher Education Report, Volume 27, Number 4. Jossey-Bass Higher and Adult Education Series, pp. 65-85.

### ***Optional Readings and References:***

Hagedorn, L. S. (2000). What contributes to job satisfaction among faculty and staff. *New Directions for Institutional Research*, # 105. San Francisco

### **Additional References for this course**

Bowen, H. R., and Schuster, J. H. (1986). *American professors: A national resource imperiled*. New York: Oxford University Press.

Cameron, K. S. (1978). Measuring organizational effectiveness in institutions of higher education. *Administrative Science Quarterly* 23(4), 604-629.

Caplow, T., and McGee, R. J. (1958). *The academic marketplace*. New York: Basic Books.

Clark, B. R. (1987). *The academic life: Small worlds, different worlds*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

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### **Grading**

Please refer to the [University Grading Policy for Graduate Courses](#) for additional information about University grading policies.

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### **Course Policies**

- [Deferred Grades](#)
- [Academic Integrity](#)
- [Accommodating Disabilities](#)
- [Use of Trade Names](#)
- [Additional Course Policies](#)

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**Disclaimer:** Please note that the specifics of this Course Syllabus are subject to change, and you will be responsible for abiding by any such changes. Your instructor will notify you of any changes.