

Special Meeting of the Graduate Faculty

A special meeting of the graduate faculty was convened at 3:30 pm on March 14, 2007 in St. Pat's Ballroom B. The only item considered at the meeting was the proposed master's degree in Industrial and Organizational Psychology. A motion was made by Prof. Lance Gentry to accept the proposed program. The motion was seconded by Prof. Samarankye. A brief discussion followed and the question was called by Dean Lutz. The proposed master's degree in Industrial and Organizational Psychology was approved unanimously by a 14-0 vote with no abstentions. The meeting was adjourned at 3:40 pm

Respectfully Submitted,
Richard E. DuBroff

A copy of the proposed program is attached:

Proposal for an Industrial/Organizational Psychology Master's of Science Degree Program



*A Degree offered by the UMR Department of Psychology
in Collaboration with the Departments of Mathematics and
Statistics, Information Science and Technology, and
Engineering Management and Systems Engineering*

*College of Arts and Sciences
School of Management and Information Systems
School of Engineering*

Update February 16, 2007

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	4
1. FORM NP.....	6
2. PROGRAM SUMMARY.....	7
3. PROGRAM NEED.....	7
Market Demand.....	7
Financial Impact.....	8
Marketing Objectives.....	8
Communication and Action Plan.....	8
Evaluation.....	8
Student Demand.....	9
Form SE.....	9
4. DUPLICATION AND COLLABORATION.....	9
5. PROGRAM STRUCTURE	10
Summary.....	10
Form PS: Credits Required for Graduation.....	11
Form PS: Residency Requirement.....	11
Form PS: Core Requirements	11
Form PS: Specialization Tracks.....	11
Form PS: Unique Features.....	13
6. FINANCIAL PROJECTIONS.....	13
FORM FP	14
Justification of Financial Projections: Expenditure.....	15
Justification of Financial Projections: Revenues.....	15
7. FORM PG: PROGRAM CHARACTERISTICS AND GOALS.....	15
Student Preparation.....	15
Faculty Characteristics.....	15
Percentage of Hours Taught by Full-time Faculty.....	15
Enrollment Projections.....	15
Student and Program Outcomes.....	16
Skills Specific to the Program.....	16
Program Accreditation.....	17
Performance on National and/or Local Assessments.....	17
Placement Rates.....	17
Alumni and Employer Survey.....	17

8. INSTITUTIONAL CHARACTERISTICS..... 19

APPENDIX A: Existing UMR Faculty and Programs Supporting the Degree... 19

APPENDIX B: Survey of Current Psychology Majors..... 20

EXECUTIVE SUMMARY

Despite UMR's growing emphasis on management disciplines as evidenced by graduate programs offered in the Departments of Information Science and Technology and the Department of Engineering Management and Systems Engineering, a gap exists in UMR's academic portfolio with regard to the specific application of psychological principles to business and other organizational settings. An **Industrial/Organizational Psychology Master's of Science Program** would address this deficit and provide students from within Missouri and beyond with a previously unmet and unique opportunity to attain graduate-level training in this field with a technical emphasis (i.e., human factors, psychometrics, leadership in technical organizations, or research).

There are no master's programs in industrial/organizational psychology on any of the other three UM campuses despite state and national projections indicating that it and related professions are in a period of growth. For example, *Money Magazine* recently (2006) ranked "Human Resources Manager," a likely job outcome for students earning this Master's degree, as the #4 best job in America with regard to factors such as pay, flexibility, easy of entry, and growth. Average salaries were listed as \$73,500 a year and the 10 year growth was estimated to be 23%. Moreover, the Missouri Economic Research and Information Center (MERIC) lists this job as experiencing a 14.5% projected growth through 2012 with an average of 139 jobs a year. MERIC lists two additional related jobs that students with a master's in industrial/organizational psychology could easily enter as experiencing similar positive growth: Administrative Service Managers (14.5% growth by 2012 with an estimated annual average of 210 openings a year) and Management Analysts (14.6% growth by 2012 with an average of 204 jobs a year). The U.S. Department of Labor Occupational Outlook Handbook reflects a similar trend for Industrial/Organizational Psychologists, with the median salary being \$71,400 (May, 2004) and a growth rate of 18-26% over the next ten years.

What follows is a proposal to offer an **Industrial/ Organizational Psychology Master's of Science Program in the Department of Psychology**. Most of the resources necessary to initiate this program are currently in place, including Distance Education facilities and three existing Graduate Certificate Programs: the Psychology of Leadership, Leadership in Technological Organizations, and Psychometrics. These programs as well as the proposed Master's program would include courses currently being offered by the Departments of Psychology, Mathematics and Statistics, Information Science and Technology, and Engineering Management and Systems Engineering. All departments have fully qualified faculty and staff to help in successfully offering this program.

In design and execution, the Master's of Science in Industrial/Organizational Psychology degree is consistent with the 2003 criteria for new programs announced by the Coordinating Board of Higher Education and the University of Missouri's President as well as the University of Missouri-Rolla's campus strategic mission. Specifically, the emphasis of the program is on using psychological science to frame and propose

solutions to the complex problems faced by individuals within organizations, and for the organizations themselves, while being complemented by UMR's rigorous technology-based programs. This degree also promises to reach a market of traditional and non-traditional students not currently served by any of UMR's existing graduate degree programs. The new program requires only one additional faculty member and only a couple of new courses are needed. The program will be taught by the regular faculty and possibly a few adjunct faculty members. The proposed degree represents an efficient use of resources because its core is a creative combination of existing graduate certificate programs and courses offered by the Departments of Psychology, Mathematics and Statistics, Engineering Management and Systems Engineering, and Information Science and Technology. Also, the degree will provide graduates who can contribute directly to the economic well being of the state and nation by helping business, government and other organizations to improve their functioning and outcomes.

Since the majority of current UMR undergraduates plan to pursue graduate education (96% in a recent survey conducted by the Department of Engineering Management and Systems Engineering of UMR alumni and current students), this program offers another option for existing students to continue their studies at UMR. Enrollment the first two years of the program is likely to be from current students and/or staff such that initial advertising costs would be minimal. Moreover, early success will generate substantial revenues that will allow the program to be expanded to handle more students and pay for additional needed resources for advertising and staffing (e.g., an enrollment of 30 expected by year 5 generating over \$170,000 in annual academic fees).

NEW PROGRAM PROPOSAL FORM

Form NP

Sponsoring Institution(s): University of Missouri-Rolla

College of Arts and Sciences

Program Title: Industrial/Organizational Psychology Master's of Science

Degree/Certificate: Master's of Science

Options: _____

Delivery Site(s): University of Missouri-Rolla

CIP Classification: _____

Implementation Date: August 2007

Cooperative Partners: _____

Expected Date of First Graduation: May 2009

AUTHORIZATION

Name/Title of Institutional Officer

Signature

Date

Person to Contact for More Information

Telephone

2. PROGRAM SUMMARY

The Industrial/Organizational Psychology Master's of Science Program is designed for students with academic interests that do not fit into any of the existing University of Missouri-Rolla (UMR) graduate management or other graduate degree programs. The program requires a minimum of 30 hours of course credit.

The I/O Master's program will allow students to divide their work among core courses in psychology offered by the Department of Psychology, methods courses offered by the Departments of Mathematics and Statistics and Psychology, and a choice of four possible specialization tracks in Human Factors Engineering, Leadership and Management in Technical Organizations, Psychometrics, or Research.

The College of Arts and Sciences (CAS), School of Management and Information Systems (SMIS), and School of Engineering will make available courses within the following departments:

- Department of Psychology (CAS)
- Department of Mathematics and Statistics (CAS)
- Department of Information Science and Technology (SMIS)
- Department of Engineering Management and Systems Engineering (SOE)

3. PROGRAM NEED

Market Demand

According to the 2007 American Psychological Association *Guide to Graduate Programs*, there are a total of 61 Psychology programs in the entire United States that offer a terminal Master's Industrial/Organizational degree with 15 of them located in the Midwest region (i.e., Arkansas, Illinois, Indiana, Iowa, Kansas, Michigan, Missouri, Nebraska, Ohio, Minnesota, and Wisconsin). The only such program in the state of Missouri is Missouri State University in Springfield. However, neither this program nor any of the others, include possible areas of specialization in human factors or management in technological organizations.

Recently, *Money Magazine* (2006) featured the "top ten jobs" in the United States with regard to factors such as pay, flexibility, growth and ease of entry. The #4 ranked job was "Human Resources Manager," a likely job outcome for UMR students earning the **Industrial/Organizational Psychology Master's of Science** degree. Moreover, average salaries were listed as \$73,500 a year and the 10 year growth was estimated to be 23%. Additionally, the Missouri Economic Research and Information Center (MERIC) in its 2006 occupational employment projections lists this job as experiencing a 14.5% projected growth through 2012 with an average of 139 jobs a year. MERIC lists two other related jobs that students earning the **Industrial/Organizational Psychology Master's of Science** degree could easily enter into as also experiencing positive growth: Administrative Service Managers (14.5% growth by 2012 with an average of 210 jobs a

year) and Management Analysts (14.6% growth by 2012 with an average of 204 jobs a year). Through 2014, the U.S. Bureau of Labor Statistics (2006-07) predicts a growth of 18 – 26% for Industrial/Organizational Psychology.

Financial Impact

If each year UMR enrolled 2-4 additional students, in 5 years the university could conservatively have an additional 20-30 master's graduate students generating over \$170,000 in annual academic fees. Since only a couple of additional courses and one faculty will be needed for the initial years of the program, it will have very small start-up expenses.

Marketing Objectives

The following serves as the basic marketing strategy and recruitment tactics for the new degree program:

1. In the first 2 years of the program, an internal communication plan will be developed that is targeted at UMR staff and other students enrolled in the existing graduate certificate programs and all UMR juniors and seniors, and those who have graduated in psychology from UMR with a G.P.A. of 3.0 or higher.
2. In the later years of the program, greater public awareness of the new degree program will be created that targets a wider group of prospective potential students from other psychology and related programs in the state who might be interested in completing a master's degree at UMR but who do not desire to study in one of the current UMR graduate management fields.

Communication and Action Plan

A communication campaign using direct mail publications, email, and a degree specific web-site will be developed. The campaign will focus on the advantages of UMR's **Industrial/Organizational Psychology Master's of Science Program** degree in today's changing technological society. Each communiqué will feature the benefits of the new program.

The Department of Psychology will assign an individual to be responsible for communications and an action plan associated with this program. He/she will prepare a step-by-step outline of tasks with an action timeline. Implementation will be coordinated around the existing graduate student recruitment program/cycle.

Evaluation

Overall, the effectiveness of this program will ultimately be measured by the number of students enrolling in the program at the end of the initial five-year implementation. From the start of the program, the number of prospective students, campus visitors, unique webpage users, and admission applications will be monitored weekly by the Department of Psychology and other departments participating in this program. Feedback from

yearly surveys of students and faculty participating in the program at the end of the academic year will be used to plan revisions each summer.

Student Demand

Enrollment for the first class of candidates is projected to be 5 students. This estimate is conservative given the number of individuals on campus having expressed an interest in the program and enrollment in the existing directly related three certificate programs (see Appendix B). It is further likely that students enrolling via Distance Education will be employed while pursuing the **Industrial/Organizational Psychology Master’s of Science** degree, and thus, will be enrolled part-time.

Form SE: Student Enrollment Projections

COHORT	Year 1	Year 2	Year 3	Year 4	Year 5
On Campus	2	4	6	10	12
Distance Ed	3	6	9	15	18
Total	5	10	15	25	30

4. DUPLICATION AND COLLABORATION

None of the UM campuses offer an **Industrial/Organizational Psychology Master’s of Science** degree, although the University of Missouri-St. Louis does offer a Ph.D. in this area. Thus, UMR students would not be competing for the same jobs since the terminal degree obtained by graduates of the UMSL program is a Ph.D. and not a Master’s degree. Also, neither the UMSL program, nor the terminal Master’s program in Industrial/Organizational Psychology at Missouri State University, has a possible technological focus.

5. PROGRAM STRUCTURE

Summary

The I/O Master’s program will allow students to divide their work among core courses in psychology offered by the Department of Psychology; methods courses to be offered by

the Departments of Mathematics and Statistics and Psychology, and specialization tracks in one of four areas, Human Factors Engineering, Leadership and Management in Technical Organizations, Psychometrics, or Research, involving courses from the Departments of Psychology, Mathematics and Statistics, Information Science and Technology, and Engineering Management and Systems Engineering. Except for the Research Track, where a research thesis is required, completion of an internship or thesis is optional.

FORM PS

PROGRAM STRUCTURE

Master's of Science in Industrial/Organizational Psychology

Credits Required for Graduation: minimum of 30 hours

Residency Requirements: several courses can be taken by distance education (and a number of the courses in this program are already offered in this fashion. There is no residency requirement.

General Education Prerequisites

Entering students will be required to have prerequisite skills equivalent to those required for graduate level courses. In addition, students should have had statistics, general psychology, experimental psychology (i.e., research methods), and three of the following six courses prior to entering the program.

Psych 305 Cognitive

Psych 308 Social

Psych 340 Sensation and Perception

Psych 330 Neuroscience

Psych 360 Personality

Psych 362 Abnormal

Students not meeting this requirement may be considered for admission, but will be expected to complete this requirement at UMR during the course of their graduate studies. Completing this requirement does not count toward the 30 hour M.S. Degree requirement.

Major requirements

**Core (12 credit hours), Methods (9),
Specialization track (9)**

Core (12 Hours)

Psych 307 Industrial Psych.

Psych 316 Psychology of Leadership

Psych 372 Group Dynamics

Psych 374 Organizational Psych.

Psych 410 Seminar*

Methods (9 hours)

Stat 353 Statistical Data Analysis

Psych 403 Psychometrics*

Advisor designates other 3 hrs., (e.g., Psych. 440 Advanced Research Methods,*
or Stat. 444 Design and Analysis of Experiments)

Specialization Track (9 of which 3 hrs. must be 400 level)

Human Factors:

- Psych 311 Human Factors
- Psych 315 Environmental Psychology
- EMgt 314 Management for Engineers and Scientists
- EMgt 380 Work Design
- EMgt 386 Safety Engineering
- EMgt 456 Advanced Personnel Management
- IST 346 Enterprise Resource Planning Systems
- IST 347 Supply Chain Management Systems
- IST 348 Strategic Enterprise Management Systems
- IST 385 Human-Computer Interaction
- IST 386 Human-Computer Interactions Prototyping
- IST 387 Human-Computer Interaction Evaluation
- IST 480 Social Informatics
- IST 487 Research Methods in Human Computer Interaction

Leadership and Management in Technical Organizations:

- Psych 401 Leadership for Engineers**
- Psych 370 Advanced Social Psychology
- Psych 378 Social Influence
- Psych 380 Cross Cultural Psychology
- Psych 407 Personnel Selection*
- EMgt 313 Managerial Decision Making
- EMgt 314 Management for Engineers and Scientists
- EMgt 327 Legal Environment
- EMgt 420 Technological Innovation Management
- EMgt 441 Case Studies in General Management
- EMgt 456 Advanced Personnel Management
- IST 351 Leadership in Technology Based Organizations
- IST 368 Law & Ethics in E-Commerce

Psychometrics:

- Psych 364 Theories and Practice of Psychological Testing
- Stat 343 Probability and Statistics
- Stat 344 Mathematical Statistics
- Stat 346 Regression Analysis
- Stat 353 Statistical Data Analysis
- Stat 444 Research Design
- Stat 445 Multivariate Statistics
- Stat 453 Linear Statistical Models I
- Stat 454 Linear Statistical Models II

Research:***

- Psych 490 (Thesis credit)
3 hrs – 6hrs of 300- or 400-level Psychology, EMgt, IST, or Statistics
pertaining to Thesis topic (to be approved by student’s academic advisor)

*Course to be developed by Psychology Department

**Course to be developed by Psychology and Engineering Management and Systems Engineering Departments

***The Research track which requires a thesis is highly recommended for students who plan to seek admission to Ph.D. programs upon completion of their M.S.

Unique Features

The proposed program is designed to provide students with a choice of specializations in Human Factors, Leadership in Technological Organizations, Psychometrics, or Research. Students can also take a course in Cross Cultural Psychology and thus add a multi-cultural component to their degree. Students completing this degree will have a strong background that prepares them for working in a variety of organizations including engineering and technically oriented settings.

6. FINANCIAL PROJECTIONS

The proposed degree represents an extraordinary example in the efficient use of resources because its core is a creative combination of existing courses and existing or proposed graduate certificate programs offered by one college and two schools at UMR. Thus, it is a value-added collaborative degree option building on available capacity and enabling an efficient use of resources to meet the documented needs. Except for a new faculty line, no new state funding will be required and the one-time costs will be minimal (e.g., small start up expenses for brochures, handouts, etc.). Moreover, in 5 years, the **Industrial/Organizational Psychology Master's of Science Program** could conservatively generate over \$170,000.

FORM FP: Industrial/Organizational Psychology Master's of Science Program

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
1. Expenditures					
A. One-time					
New/renovated space	0	0	0	0	0
Equipment					
Library	0	0	0	0	0
Consultants	0	0	0	0	0
Printing	0	0	0	0	0
Total One-time	0	0	0	0	0
B. Recurring					
Faculty	0	61,000	62,424	63,673	64,947
Staff	0	0	0	0	0
Benefits	0	16,524	16,855	17,192	17,536
E & E: recruiting	0	0	500	0	0
Library	0	0	0	0	0
Scholarships for on campus students (\$1000/student)	2000	4000	6000	8000	8000
Total Recurring	2000	4000	6500	8000	8000
Total (A + B)	2,000	81,724	85,799	88,865	90,483
2. Revenues					
State Aid-CBHE	0	0	0	0	0
State Aid-Other	0	0	0	0	0
Tuition/Fees					
(# on-campus FT @ \$5925/yr)	11,850 (2)	23,700 (4)	35,550 (6)	59,250 (10)	71,100 (12)
(#of Distance Ed X .5 of \$11,104/yr)	16,656 (3)	33,312 (6)	49,967 (9)	83,279 (15)	99,935 (18)
Institutional/Resources					
Other					
Total Revenues	\$28,506	\$57,012	\$85,517	\$142,529	\$171,035

Justification of Financial Projections: Expenditures

To help recruit students, some scholarship assistance will be required. An estimate of the cost is a \$1000 scholarship for each on-campus student.

Justification of Financial Projections: Revenues

The number of student FTEs enrolled in the program is calculated from the enrollment projections (see page 9). Given that distance students are projected to be part-time, their numbers are multiplied by 0.5. The number of student FTEs was then multiplied by the amount of in-state tuition generated for on-campus and distance courses.

7. Form PG: PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Student Preparation

Students seeking admission to the **Industrial/ Organizational Psychology Master's of Science Program** will be required to have an undergraduate degree with a minimum G.P.A. of 3.0 from an accredited college or university. A maximum of six hours may be transferred from other colleges or universities. Candidates will be required to take the Graduate Record Examination and to meet the existing University requirements for admission. Students will also be expected to have had statistics, general psychology, and experimental psychology and three of the following six courses prior to entering the program: Cognitive, Social, Sensation and Perception, Neuroscience, Personality, and Abnormal Psychology. Students not meeting this requirement may be considered for admission, but will be expected to complete this requirement. Completing this requirement will not count toward the 30 hour M.S. Degree requirement.

Faculty Characteristics

Faculty (regular, full-time, or adjunct) are expected to have a Ph.D. in the discipline relevant to the course being taught and to meet the requirements for Graduate Faculty status as described by the University of Missouri-Rolla.

Percentage of Hours Taught by Full-time Faculty

No additional credit hours will be assigned to full-time faculty to teach in the **Industrial/ Organizational Psychology Master's of Science** program. Teaching assignments will remain as normally scheduled. Little change is anticipated with regard to expectations for the faculty (e.g., student contact hours or faculty development programs).

Enrollment Projections

Details of projected enrollments are found in previous sections. The following Table summarizes the totals.

Projected Enrollments by the End of Five Years

Student FTE majoring in program	25 - 30
Percent of full-time and part-time enrollment	Approximately 40% full-time and 60% part-time students

Student and Program Outcomes

The program expects 10-15 enrollments per year at the end of the third year after the program begins. At the end of five years, 20- 30 enrollments per year can be expected.

The program expects 2-3 graduates per year at the end of the third year after the program begins. At the end of five years, at least 12-14 graduates per year will complete their **Industrial/ Organizational Psychology Master's of Science** degree.

There is no licensing, certification, or registration needed for students completing this degree program.

The program is designed to promote the completion of Master's degrees. As such, this program is expected to increase the number of graduate degrees attained by students at this university.

Skills Specific to the Program

In general, Industrial/Organizational Psychologists help organizations define strategies, set policies, and implement practices involving the performance and well being of people at work. These psychologists apply the rigor and methods of scientific psychology to issues of critical relevance to business and other work organizations. Graduates of the **UMR Industrial /Organizational Psychology Master's of Science** degree program will have the skills to help management make effective decisions regarding talent within organizations, including the assessment of people for selection and placement into jobs; development of effective training programs; strategies for organizational development; measurement of performance; and ways to promote quality of work-life. A strong human factors presence in the program also assures that graduates have skills that enable them to be knowledgeable in dealing with a variety of human performance issues in many settings including in technological environments (e.g., workload, fatigue, situational awareness, usability of equipment, attention, human reliability, stress, visualization of data, individual differences, accessibility, safety, human error, and decision making). Moreover, a strong emphasis in psychometrics will provide assurance that graduates have the necessary skills to measure knowledge, skills, abilities, and personality characteristics of people for a variety of employment-related purposes (e.g., selection for promotion, training and development and assessment of employee morale, job satisfaction, and attitudes towards management or customers).

Increasingly, people factors are recognized as a major determinant of organizational performance and as a key competitive differential. Graduates of the **UMR Industrial**

/Organizational Psychology Master’s of Science degree program will be able to provide important advice with regard to a variety of the people factors critical for creating and maintaining the maximally effective organizational climate and/or culture.

Program Accreditation

No specialized accreditation for a Master’s degree in Industrial/Organizational Psychology exists nor is necessary.

Performance on National and/or Local Assessments

Since this is an upper-level degree program with no accreditation at the Master’s level, it is not anticipated that students will take any standardized tests after graduation from, or during, the degree program.

Placement Rates

It is expected that a significant percentage of the target population served by this degree will be professionals already in the market place who are interested in obtaining an advanced level of training and education in this field of psychology. Thus, a significant portion of the degree recipients in the program will already be employed and that in excess of 90% of the remaining students will find employment in a business, government, or other organizational setting.

Alumni and Employer Survey

Alumni surveys will be conducted each year, using similar methods to those currently employed by other graduate programs at UMR. Additionally, employer surveys will be conducted annually, using similar methods to those being conducted in other graduate programs at UMR.

8. INSTITUTIONAL CHARACTERISTICS

The **Industrial/ Organizational Psychology Master’s of Science** degree reflects the mission of the University of Missouri-Rolla. As indicated in its Mission Statement, “UMR emphasizes a broad range of educational and research programs with special emphasis on science and technology.” The combination of courses for the degree and its specialization tracks clearly represent examples of this type of education.

The UMR mission statement also calls for UMR to be “a premier source of leaders for our rapidly changing society—leaders able to identify and solve complex societal and technical challenges; to create, assimilate, synthesize and communicate knowledge; to work effectively as team members in diverse environments; to adapt to change through life-long learning; and to improve the life for the citizens of the state and nation.” The

Industrial/ Organizational Psychology Master’s of Science degree is uniquely suited to accomplish all of these goals in an organizational setting and particularly in technologically oriented settings.

Additionally, the UMR Mission Statement indicates “The university stimulates economic development by creating and disseminating knowledge, by providing an educated workforce, by encouraging and providing continuing education for lifelong learning, and by fostering partnerships among university, industry, government groups.” As a new graduate degree option for UMR students, the **Industrial/Organizational Psychology Master’s of Science** degree not only provides the State of Missouri with more opportunities for an educated workforce, but it will help further develop existing partnerships among university, government and private organizations in the State of Missouri.

APPENDIX A: Existing UMR Faculty and Programs Supporting the Degree

The **Industrial /Organizational Psychology Master's degree** program at UMR provides a unique opportunity to integrate the research and teaching expertise of faculty members in the departments of Psychology, Engineering Management and Systems Engineering, Information Science and Technology, and Mathematics and Statistics. Except for two new courses that will be taught for this degree, the others courses are already being taught as part of existing programs on campus. Thus, the proposed Industrial/Organizational Master's degree takes advantage of existing resources and combines them to develop a quality Master's degree in Industrial/Organizational Psychology.

Listing of Faculty to teach the Industrial/Organizational Psychology Courses

Psychology

William Canu, *Assistant Professor*, Ph.D. (The University of Texas at Austin) - Clinical psychology; aspects of Attention-Deficit/Hyperactivity Disorder (ADHD) in adult populations; clinical interventions; research on teaching methods and effectiveness

Frances (Dee) Haemmerlie Montgomery, *Curator's Teaching Professor of Psychology and Associate Dean for Undergraduate Affairs, College of Arts & Sciences*, Ph.D., (Florida State University) - Factors associated with self-esteem, gender issues; personality; leadership skills

James Martin, *Assistant Professor*, Ph.D., (Louisiana State University) - Industrial and Organizational Psychology; motivational processes and performance; and the role of global and facet personality traits

Robert Montgomery, *Professor and Chair*, Ph.D., (Oklahoma State University) - Organizational behavior; leadership; persuasion; group dynamics; research design, measurement, evaluation research; personality and success; personnel selection

Michael Nelson, *Assistant Professor*, Ph.D. (Dartmouth College) - Cognitive neuroscience and visual attention; psychophysics and neurological control of saccadic eye movements; visual perception; cross-modal (visual and auditory) integration; meta-analysis; neuroanatomic correlates of schizophrenia

Julie Patock-Peckham, *Assistant Professor*, Ph.D., (Arizona State University) – Social influence; alcohol abuse; addictive behaviors; aggression; health psychology; anger communication styles; social psychology

Don Sharpsteen, *Associate Professor*, Ph.D., (University of Denver) - Social and personality psychology; psychometrics; social cognition; close relationships; romantic jealousy; gossiping; intimacy in friendships

Information Science & Technology

Barry Flachsbart, *Professor and Chair*, Ph.D., (Stanford University) - Artificial Intelligence, Large Engineering Databases, Information Systems Project Management

Richard Hall, *Professor*, Ph.D., Texas Christian University - Human computer Interaction, Web and New Media Design, Web Based Learning Technologies

Michael Hilgers, *Professor, Associate Chair, and Director of the Center for Technology-Enhanced Learning*, Ph.D., (Brown University) - Learning Technologies, Participatory Simulations, Interactive Media, Virtual Reality, Software Architecture

William Kehr, *Instructor and Advisor*, Ph.D., (University of Missouri-Rolla) - Telecommunications and Data Networks, E-Commerce, Marketing, Innovation Diffusion

Hong Sheng, *Assistant Professor*, Ph.D., (University of Nebraska-Lincoln) - Human-Computer Interaction

Vincent Yu, *Assistant Professor*, Ph.D., (University of Louisville) - Intelligent Agents, Demand Forecasting, Business Process Reengineering, Data Mining, and Knowledge Management

Mathematics and Statistics

D. Drain, *Assistant Professor*, Ph.D., (Arizona State University) - Experiment design; response surface methods; spatial statistics; nonparametric smoothing; hybrid heuristic optimization involving genetic algorithms; data mining

G. Gadbury, *Associate Professor*, Ph.D., (Colorado State University) - Casuality; foundations of inference; mathematical statistics; nonparametric methods; analysis of high dimensional data.

V.A. Samaranayake, *Professor*, Ph.D., (University of Minnesota) - Dimension reductions; nonparametric regression; statistical genetics; biostatistics

Xuerong Wen, *Assistant Professor*, Ph.D., (University of Minnesota) – Nonlinear and non parametric regression; computational statistics; statistical genetics

Systems Engineering and Engineering Management

W. Daughton, *Professor and Department Chair*, Ph.D., (University of Missouri-Columbia) - Process management; project management; strategic planning; organizational development

B. Dow, *Lecturer*, Ph.D., (Purdue University) - Project management; engineering economics; finance

D. Enke, *Assistant Professor*, Ph.D., (University of Missouri-Rolla) - Financial engineering; financial forecasting; risk management; investment; engineering economics; electricity markets

R. Luechtefeld, *Assistant Professor*, Ph.D. (Boston College) - Action research; dialog, group, and organizational learning; learning simulations; social processes

S. Murray, *Associate Professor*, Ph.D. (Texas A&M University) - Industrial engineering; project management; productivity improvement; human factors; safety

D. Myers, *Professor*, J.D. (St. Louis University) - Management of technology; technical entrepreneurship; technology transfer; product management

APPENDIX B: Survey of Current Psychology Majors

An internet survey of existing psychology majors was completed in February 2007. All majors were asked how interested they would be in pursuing a Master's Degree in Industrial/Organizational Psychology if it were offered at UMR. They were given four choices:

- A. I would enroll
- B. I would seriously consider enrolling
- C. It is unlikely I would enroll
- D. I definitely would not enroll

Nineteen students responded with three current majors indicating they would enroll and 11 indicated they would seriously consider enrolling. Four indicated it is unlikely they would enroll and only 1 checked they definitely would not enroll (because they were interested in a different area of psychology). The GPA's of those indicating they would enroll ranged from 3.6 to 4.0.

Students were also given the opportunity to make comments. A number of majors did and they made a variety of positive comments:

- I am very interested in a graduate degree in Psychology.
- I think a M.S. in I/O is a great idea.
- I think that the faculty here at UMR are excellent and that a graduate psychology degree would be beneficial not only to psychology majors but to many in business/management & engineering management type degree programs.
- I am very excited about the prospect of this program and look forward to hearing more about its progress.
- I think this is a good opportunity for any one who is interested in Industrial/Organizational psychology.
- I think that an M.S. degree in I/O Psychology would definitely benefit UMR as a whole.
- I can't wait for this program to be approved.
- It is exciting to hear that this program is a possibility at UMR.
- I would like to know during what time frame this program would initially be started.
- I would definitely enroll in this program as soon as it is offered. Any idea how long it would take to be approved? This honestly is my only hope of pursuing a career in Psychology. I can't wait.
- I am completely excited about this possibility! I'd like some more information about it as soon as it's available.
- This is such an exciting possibility! I think there would be a lot of interest in this.