New General Examination Format

May 24, 2013

Purpose: The Industrial-Organizational (I-O) Psychology Division at the University of Connecticut voted to adopt a standardized general exam format at its May 10, 2013 meeting. Given the numerous variations to the present general exam process, as well as its time-consuming nature for both faculty and students, a standardized approach has been adopted to better prepare students for working in the field of I-O Psychology and also to expedite the examination process for everyone involved. This document presents the working draft of this new exam format.

Goals of the General Examination: The degree students receive is in I-O Psychology; in line with this, students should be well versed in all elements of the I-O field. To that end, one purpose of the General Examination is to determine if a student can demonstrate a well-rounded knowledge base and the ability to critically evaluate and discuss all aspects of the field of I-O Psychology as outlined by the I-O Graduate Training Program at the University of Connecticut. Therefore, students are expected to study – and be tested on – the entirety of the I-O field. Successful completion of the General Examination should reflect that a student has achieved a working knowledge of all aspects of I-O Psychology and the ability to engage in informed, well-reasoned discussion of I-O Psychology topics as is often expected of a doctoral candidate in this field; for example, when responding to challenging questions following a conference presentation, in exchanges with other I/O psychologists about their research, when interviewing for jobs, and when it becomes necessary to explain the field of I/O psychology to other psychologists or non-psychologists.

Although a broad knowledge base is important, it is also important to develop a specialty area within the I-O field in preparation for doctoral research. Thus, a second purpose of the General Examination is to examine students in their area of research specialization. To compare these two exam goals, then, the first part of the General Examination is intended to demonstrate a thorough understanding of the broad field of I-O Psychology, and the second part is intended to demonstrate a deep understanding of a specific area of the field.

Method: The general exam will be offered once a year—during the week before fall classes. The exam will consist of three phases across three days. Days 1 and 2 will be written examinations, and Day 3 consists of an oral defense of the written answers and the student's ability to "think on their feet."

Exam Day 1, called the General Day, will ask students to write responses to four out of five questions that are written by the I-O Division Faculty and which are administered to all students taking the exam on this day. These questions can cover any topic in the field of I-O psychology. Some questions may be required.
Exam Day 2, called the Specialty Day, will again ask students to write responses to four out of five questions which for this day are written by the student’s advisory committee. These questions will cover the student's own selected specialty area in the field of I-O psychology. That is, the student determines his/her specialty area in the field of I-O psychology (with the guidance of the major advisor); the student’s committee then writes five items tailored to topics in this specialty area. Some questions may be required. Example specialty areas include (but are not limited to): Employee Selection\(^1\), Human-machine Systems, Judgment and Decision Making\(^1\), Incivility, Leadership, Macroergonomics, Team Processes\(^1\), Work-Family Issues, Work Motivation, and Work Stress\(^1\). Cross-area specialization is also possible; for example, topics could require application of specialized knowledge and deep understanding of incivility in regard to Occupational Health Psychology.

Finally, Exam Day 3 is an oral exam. The purpose of this portion of the exam is two-fold: (1) to allow the student an opportunity to defend, clarify or correct aspects of their written answers to the committee, and (2) to allow the committee to assess the student’s ability to critically reason “on their feet.” The oral defense will occur no sooner than two weeks after the completion of the written exam, and no later than four weeks after the completion of the written exam, at which time the student defends his/her answers to his/her committee. Additional questions may be asked during this oral defense including (but not limited to): questions about skipped items or partially answered items, clarification questions, or requests to integrate two answers into one new answer.

Student responses will be evaluated for completeness; demonstrated mastery of the content areas questioned; and the ability to integrate multiple topics and lines of research into a coherent interpretation or argument. Oral defense performance will be evaluated based on how well the student reasons through questions and arguments, and how the student defends his/her positions.

In the event a student does not successfully meet the standards for passing any portion of the exam, the committee may elect one of two courses of action:

1. The student may be asked to prepare further, and then repeats the entire exam process the following year, or

2. The student may be asked to write short essays covering the topics or approaches the student's committee feels he/she has not adequately prepared. These essays will be between 4-5 pages in length (double spaced), and will be expected to demonstrate that the student understands the topics or approaches identified by the committee. This would need to be completed within two weeks of the oral defense and will be evaluated by the student’s major advisor.

\(^1\) Note, individual major advisors may find this specialty too broad. Specialty topics should be agreed upon by student and major advisor.
Preparation for the Examination: Students are expected to begin preparing for the general examination from the time they begin their graduate studies. This preparation includes coursework, research, and regularly reading professional journals in the field on an ongoing basis. In addition, many students will choose to devote a concentrated block of time during the spring and/or summer before the examination to focused review and preparation for the exam. Students should expect to utilize course reading lists, Handbook chapters, and recent years of top-tier journals to guide their studying. Additionally, they should feel free to consult with the I/O Faculty to ascertain other general and/or specific directions for studying. Students are responsible for ensuring that they will be well prepared to answer any questions, in particular in their area of specialization. It is appropriate and encouraged for students to work together when preparing for the exam.

Examination Process: Exam Day 1 and Exam Day 2 will each involve a four-hour block of time (e.g., 9 a.m. to 1 p.m.) on separate days during the week that both occur before classes begin for the fall semester. Exam Day 1 and Exam Day 2 will both take place on campus, and all answers will be completed on a personal computer or laptop. Students are NOT allowed to use notes, readings, or the internet while taking the examination. The only material allowed to the student during the exam is a hard copy of the reading list that has guided their preparation (see the attached example). Day 3 of the exam will be a one-hour oral examination, scheduled to take place 2 – 4 weeks after the written examination is completed. Examiners for Day 1 include all I/O Faculty. Examiners for Day 2 and Day 3 are the faculty members of the student's committee, but may include additional members of the I-O Faculty as they desire to participate.

Petition for Alternative Exam: In extraordinary cases, a student and his/her major advisor may formally petition the I-O Faculty for the alternative, Project-based General Exam. The student first prepares a written petition in which he/she outlines why the Project-based General Exam is more beneficial than the standard examination to him/her and his/her future career plans. The I-O Faculty will then vote on whether or not to grant the use of the alternative format; a majority must approve the proposal. If approved, the student and major advisor will craft a formal project-based proposal for the student's committee to approve.

Advocacy for Method: Below are a few quotes from individuals who have taken General/Preliminary Exams based on a similar three-phase approach stating the benefits of such a method.

“I thought [the exam process] was a great experience! It gave me the opportunity to reflect on everything that I have learned much deeper and integrate topics in ways I didn’t know fit together before. Although the process is daunting at times, post comps I can sincerely say that it’s a much needed and useful skill.” Lawrence Houston, Doctoral Candidate, The Pennsylvania State University.

“The preliminary exam format encourages a deep understanding of all content areas and requires one to draw connections between disparate research streams typically labeled with a silo
approach as "I" or "O." As a practitioner, I am confident that I can answer any client's presented challenges because I understand the associations between the client's primary concerns and the I-O psychology literature and topics in which I am more experienced. The breadth of knowledge I gained while studying for the preliminary exam is always the foundation on which I build my applied research and consulting recommendations.” Erin Gerbec, Post-Doctoral Research Fellow, Air Force Research Laboratory Wright-Patterson Air Force Base, OH.

"I have never known more about the field of Industrial-Organizational Psychology than I did during the semester of my preliminary exam." Kevin Nolan, Assistant Professor Hofstra University.

“The flexible question format allowed tests to be tailored appropriately to student interest, while still hitting the important points of the field in general. Further, the opportunity for defense left little room for inaccuracies in understanding if a student was well-versed in both the general aspects of the field, as well as their own area of specialization.” Nathan Carter, Assistant Professor University of Georgia.

“The preliminary exam was effective because it not only required us to learn a large portion of the most influential I-O literature to date, but it required us to draw connections between the different content areas, resulting in a far more well-rounded perspective than when we started. Though I took the exam a few years ago, I still find myself drawing on that knowledge base which is useful when attempting to frame my work within the broader I-O literature.” Michael Daniels, Visiting Scholar Singapore Management University.
Begin *Example* General Day Reading List
**History of I-O Psychology**


**Job/Task Analysis & Competency Modeling**


**Criterion Theory and Development**


**Judgment and Decision Making**


**Job Evaluation and Compensation**


**Individual Differences**

Ackerman, P. L., & Heggestad, E. D. (1997). Intelligence, personality, and interests: Evidence for overlapping traits. Psychological Bulletin, 121(2), 219-245.


**Intelligence**


**Personality**


Example General Reading List


**Development over Time**


**Individual Assessment**


**Recruitment/Selection**


**Legal Issues and Scoring**


Example General Reading List


**Selection Methods**


**Biodata**


**Interviews**


**Cognitive Ability Tests**


Example General Reading List


**Personality & Integrity Tests**


**Situational Judgment Tasks**


**Assessment Centers**


Example General Reading List

**Banding**


**Utility Analysis**


**Selection Decision Making**


**Validation**


**Performance Appraisal and Feedback**


**Training and Socialization**


**Attitude Theory, Measurement, and Change**


**Job Satisfaction**


Example General Reading List


**Organizational Commitment and Job Involvement**


**Organizational Citizenship Behaviors**


**Counterproductive Work Behaviors**


**Justice/Trust/Cynicism**


Example General Reading List


**Health and Stress in Organizations**


**Motivation, Self-Regulation, and Goal Orientation**


Example General Reading List


**Leadership**


Example General Reading List


**Small Group Theory and Team Processes**


**Organizational Theories, Culture, Change, and Development**


Diversity, Emotions, and Negotiation


Ethical Issues in I-O Psychology


Cross-Cultural I-O Psychology

Example General Reading List


Human Factors

**Handbook of human factors, 2nd edition (HHF2)**


Chapters 1, 2, 15, 18, 49, 51, 57

**Handbook of human factors, 3rd edition (HHF3)**


**Human Factors in Systems Engineering (HFSE)**


**Macroergonomics (ME)**

Begin Example Specialty Day Reading List
(Specialty: Quantitative and Research Methods)
Example Specialty Reading List

**Research Methods**


**Theory**


**Lab v. Field Research**

Example Specialty Reading List


**Qualitative Research in Organizations**


**Experimental/Quasi-experimental Designs**


**Self-report**


**Surveys**

Example Specialty Reading List


**Sampling**


**Types of Errors**


**Fallacy of Null Hypothesis Significance Testing**


Loftus, G. R. (1996). Psychology will be a much better science when we change the way we analyze data. *Current Directions in Psychological Science, 5*, 161-171.


**Validity/Reliability**


**Reliability**


Example Specialty Reading List


**Validity**


**Common Method Bias**


Multi-level research


Example Specialty Reading List


**Statistical Methods/Data Analysis**


**Power Analysis**


**Effect Size**


**Measures**


**Missing data techniques**


Example Specialty Reading List


CTT and IRT


Generalizability Theory


**Meta-analysis**


Example Specialty Reading List

Exploratory Factor Analysis


Confirmatory Factor Analysis


Mediation/Moderation


Example Specialty Reading List


**Structural Equation Modeling**


Example Specialty Reading List


Scientist-Practitioner Model, Cross Cultural Research, Research Ethics


