Department/Program: Department of Psychology
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A. Brief Introductory Statement:

The Psychology department is committed to excellence in undergraduate training in the science of psychology. We do so by offering students not only the highest caliber of classroom instruction but also extensive opportunities for professionally authentic experiences in research and community engagement. We are dedicated to training students to be psychologically literate citizens who engage in scientifically- and ethically-informed judgments, decision-making, and actions. As such, our curriculum emphasizes students acquiring knowledge about the discipline, applying that knowledge to real world situations, adopting scientific and ethical values, attitudes, and beliefs, and gaining interpersonal and communication skills.

Students report having very positive experiences in their classes, and graduating psychology majors report being extremely satisfied with the quality and breadth of their instruction. WSU psychology student have had next step success in graduate school in the discipline (with recent acceptances to graduate programs at Harvard, Michigan, Texas A&M, University of Kentucky, University of Utah, and Utah State University, among many others), related disciplines (Social Work, Education, Marriage and Family Studies, and Criminal Justice) and other professional schools (Medicine, Law, Business, and Pharmacy). Psychology students are hired in a wide range of employment positions and do so at rate above the employment rate for the state.

Psychology faculty members are actively engaged in the discipline, the community, the university, and the department. Counted among them are a number award-winning teachers and researchers. They were early adopters and continue to be leaders of the university initiative for undergraduate research and community-based scholarship. They are also involved in a variety of interdisciplinary initiatives on campus, including Neuroscience, Linguistics, and Women’s Studies. The faculty members are excellent campus and community citizens serving in leadership positions both on campus and off. Regent reviews of 2006 and 2012 of the department by outside experts have been extremely positive and department members continue to aspire to become a model for the university and the discipline of innovative and effective undergraduate training in psychology.

B. Mission Statement

*Through excellence in training in the science of psychology, the mission of the Department of Psychology at Weber State University is to facilitate students’ career aspirations and academic goals in the context of an undergraduate, Liberal Arts University, and a department which values teaching and research.* (Adopted: Spring 2008)

Psychology first appeared in the curriculum of Weber Academy (which later became Weber State University) in 1892, with its role to enhance the skills of prospective
schoolteachers. Psychology became an autonomous department in the 1950s and quickly grew in size and popularity, constituting 4% of the total SCHs for the entire institution. Today, the Psychology Department remains an important part of the academic life of Weber State University and the College of Social and Behavioral Sciences.

The mission of the Psychology Department is consistent with the department’s long tradition of valuing excellence in teaching. The mission statement was last reviewed and approved by the department in the spring of 2008. The statement centrally specifies undergraduates generally (not specifically majors) as those served by the Department and excellence in training students as the goal of the program. The word "training" was meant to convey an approach to our mission, which goes beyond mere classroom teaching to include student engagement in research, supervised Practicum, and related activities. In this sense, the department faculty members expect that students acquire not only discipline-specific content knowledge (i.e., definitions, theories, research findings), but also discipline-appropriate ways of thinking (i.e., the scientific attitudes and skills to analyze, interpret, and understand human behavior). Training in discipline-related content and ways of thinking are strongly believed to be effective in promoting students’ career aspirations and academic goals, whether or not they continue in the discipline.

Additionally, the department recognizes its role within the university in providing training in the Liberal Arts tradition. This adds another level of responsibility to prepare students to live in the 21st century as responsible, ethical, and engaged citizens who can synthesize and integrate information and make informed decisions. The final feature of the mission statement addresses the influences of the departmental focus on teaching and research. This context emphasizes a consensus among the faculty of the value of teaching and research in the training of students. All faculty members are committed to the importance of student experiences inside and outside the classroom, including research, for them to effectively internalize the values and skills of the discipline in the liberal arts tradition, and to be well prepared for any career path, whether that is a job, professional school, or graduate school.

C. Goals and Learning Outcomes

The Psychology department created a set of departmental goals that were limited in number, integrated but somewhat orthogonal to each other, and broadly associated with a different mode of interaction between faculty and students. We arrived at 4 goals. The first goal is student acquisition of content knowledge of the discipline (Knowledge), which is largely realized through traditional, relatively impersonal, instructional modes of interaction. The second goal is for students learning the use of their disciplinary knowledge to understand themselves, others, and real-life situations (Application). Such a goal involves modes of faculty-student interactions that promote reflective thinking in students, with higher levels of student self-disclosure, engagement, and assessments focusing on concrete situations. The third goal of student adoption of scientific and ethical

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values (Values/Ethics) goes beyond mere instructional forms of interaction to faculty socializing students into the discipline by serving as models and mentors/tutors. The fourth goal of developing student skills for interpersonal interactions and communications (Interpersonal Relations and Communication) involves faculty serving as supervisors, facilitators, and directors of students who provide feedback, advice, comments, direction, and guidance.

For each goal specified by the department there are two learning outcomes and the behavioral measures used to assess those goals. These learning outcomes are more specific and concrete than the departmental goals which are aspirational, and the behavior measures by which the outcomes are measured are written to apply in different ways to each course in the curriculum.

1. **Knowledge**: Students will understand psychology as a scientific discipline. Essential to this, students will understand a core set of statistical and methodological knowledge regarding how psychologists critically evaluate, creatively test, and scientifically defend psychological claims. They will also understand a core set of content knowledge addressing the biological, cognitive/behavioral, social/personality, and developmental aspects of behavior and their integration.

   1.1. Characterize the nature of the science of psychology and grasp the foundations of the science for consuming and producing psychological claims.

   *Students will be able to generally characterize psychology as a science, distinguishing its assumptions and methods with those of other disciplines, and specifically describe the strengths and limits of different research methods and the validity of conclusions derived from the research when consuming or producing psychological claims.*

   1.2. Demonstrate knowledge, understanding, and synthesis of the breadth and depth of psychological science.

   *Students will be able to demonstrate theory and research representing different content areas (biological, developmental, abnormal, experimental, and individual differences) and approaches (e.g., behavioral, biological, cognitive, evolutionary, humanistic, psychodynamic, and socio-cultural) of the discipline and appreciate the interactions at the different levels of analysis synthesizing them into comprehensive and multifaceted bio-psycho-social explanations human nature.*

2. **Application**: Students will be able to critically apply psychological principles and research to explain social issues, inform public policy, solve problems, understand themselves, and achieve career goals.

   2.1. Students will be able to transfer their knowledge of psychological science to understanding and improving society.
Students will be able to describe the ways that psychological science has applications to social issues, processes, and domains (mental health, law, military, business, and education) and demonstrate ways that disciplinary knowledge can be used to inform social policy, solve social problems, and improve human functioning.

2.2. Students will be able to transfer their knowledge of psychological science to understanding and improving themselves and planning their future.

Students will be able to use knowledge of psychology science to promote their personal development and career planning by gaining insight into their behavior, mental processes, interests, and talents to develop self-management, self-improvement, and self-assessment strategies necessary to reach their personal and professional goals.

3. Values/Ethics: Students will share key values adopted by psychologists, which include (but are not limited to) skepticism and intellectual curiosity, tolerance of ambiguity, respect for human diversity, appreciation of their civic, social, and global responsibilities, and humility regarding the limits of their psychological knowledge and skills. Students will also grasp the spirit of the APA Code of Ethics, follow its guidelines, and recognize the necessity of ethical behavior in all aspects of the science and practice of psychology.

3.1. Students will understand and adopt key attitudes beliefs, values, and responsibilities consistent with being a student of psychological science.

Students will make strides in adopting key assumptions (e.g., monism), beliefs (e.g., determinism), attitudes (skepticism and intellectual curiosity, tolerance of ambiguity) values (humility regarding their knowledge and skills), and responsibilities (e.g., interpersonal, civic, social, and global responsibilities) of being a student of psychological science.

3.2. Students will understand and uphold the ethical standards which guide their interpersonal, professional and scientific behavior.

Students will learn and behave in a manner consistent with the APA ethical code regarding their research, professional, and interpersonal activities.

4. Interpersonal Relations and Communication: Students will exhibit skills to professionally communicate their understanding of terms, concepts, research, and theories of the discipline to others via written and oral formats. Students will also have interpersonal and collaborative skills necessary to effectively work in groups with others who hold diverse opinions, beliefs, and attitudes.

4.1. Students will acquire skills to communicate professionally to others in various formats following disciplinary practices and conventions (e.g., APA style).

Students’ written, oral, and visual communication in formal and informal contexts will demonstrate an adequate level technical competence (grammar, structure, and style) and
use of professional conventions (e.g., APA style and other professional conventions) to express, defend, or critique psychological claims ideas in a disciplinary appropriate manner.

4.2. Students will demonstrate competence to work effectively in groups (projects, research, etc.)

*Student will learn to effectively work with others in group settings, which includes demonstrating skills to listen, communicate, and collaborate in unbiased, non-prejudicial ways.*

**D. Curriculum Grid**

The curriculum grid is an accounting of how department goals and the corresponding learning outcomes are instantiated in the curriculum. Groups of faculty members who teach each general education, core general, core content, and high impact (research and service learning) courses compared and contrasted their classes in light of the department goals, the number of assessments dedicated to each program goal, and the weighting or importance of assessments in the calculation of final grade in the course. They then rated each course on a 1 (low) to 4 (high) scale, which indexes the emphasis given to each program goal in the class. For more details of the justifications of the ratings given for any class, go to the department assessment web site and click on the EOL curriculum map for the corresponding course number.

The curriculum grid is organized by course type (Gen Ed courses, Core Content courses, Core General courses, and High Impact courses). **Gen Ed** courses are designed to enhance students’ understanding not only of psychology, but the social sciences in general. **Core Content** courses include the courses serving as the breadth requirement in the curriculum, so that psychology students are exposed to a range of ways psychologists conceived of and study human nature – as a biological system, a developing system, as a system which breaks down, as a system with elements such as learning and information processing that are considered universal, and a system with elements that are different for different people depending on their social context or personalities. **Core General** courses are those which highlight the statistical, computational, and methodological tools used by psychologists in how they study human nature and include Statistics, Stats Lab, and Research Methods in Psychology. These courses are designed to promote in students the skills to think like psychologists. Finally, **High Impact** courses are those which allow students to apply the breadth of their knowledge, and skills to think like a psychologist to academic or community research projects, including directed readings, projects and research, practicum, and capstone research project.
D1. General Education Classes

<table>
<thead>
<tr>
<th>Course</th>
<th>Program Goals</th>
<th>Knowledge</th>
<th>Application</th>
<th>Ethics/Values</th>
<th>Relations and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psy 1010</td>
<td>Introductory Psychology</td>
<td>4</td>
<td>3</td>
<td>2.5</td>
<td>2</td>
</tr>
<tr>
<td>Psy 2000</td>
<td>Interpersonal Relationships</td>
<td>4</td>
<td>3</td>
<td>2</td>
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</tr>
</tbody>
</table>

Note: Introductory Psychology is also a Core General course and is a prerequisite for most other courses in the curriculum.

Both Introductory Psychology (PSY 1010) and Interpersonal Relationships (PSY 2000) are General Education classes that must fulfill additional university-based general education goals which are assessed according to different student outcomes than those identified by the program\(^2\). Introductory Psychology and Interpersonal Relations are weighted most strongly on the Knowledge goal as most of the assessments and most highly weighted assessments address the content knowledge. Interpersonal Relations and Communication is also related strongly for PSY 2000, but less so for PSY 1010 because of the focus of the course. Application was highly rated in both courses, reflecting an emphasis to help students appreciate the real world implications of the material discussed in the classes. Ethics/Values remain important, but because of the enrollments and resources this goal is most challenging to achieve in these classes.

\(^2\) See [http://www.weber.edu/psychology/GenEdReauthorization.html](http://www.weber.edu/psychology/GenEdReauthorization.html), click on PSY 2000 and PSY 1010 General Education Reauthorization Documents.
## D2. Core Content Classes

<table>
<thead>
<tr>
<th>Area</th>
<th>Number</th>
<th>Title</th>
<th>Knowledge</th>
<th>Application</th>
<th>Ethics/Values</th>
<th>Interpersonal Relations and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A</td>
<td>Psy 2730</td>
<td>Biological Psychology</td>
<td>4</td>
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<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>Neu 2050</td>
<td>Introduction Neuroscience</td>
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<tr>
<td>Area B</td>
<td>Psy 3000</td>
<td>Child Psychology</td>
<td>4</td>
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<td>2</td>
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<tr>
<td></td>
<td>Psy 3140</td>
<td>Adolescent Psychology</td>
<td>4</td>
<td>3</td>
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<td>2</td>
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<tr>
<td>Area C</td>
<td>Psy 3010</td>
<td>Abnormal Psychology</td>
<td>4</td>
<td>4</td>
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<td>2</td>
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<tr>
<td>Area D</td>
<td>Psy 3250</td>
<td>Conditioning &amp; Learning</td>
<td>4</td>
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<td></td>
<td>Psy 3500</td>
<td>Cognitive Psychology</td>
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<td>2.5</td>
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<tr>
<td>Area E</td>
<td>Psy 3430</td>
<td>Theories of Personality</td>
<td>4</td>
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<td></td>
<td>Psy 3460</td>
<td>Social Psychology</td>
<td>4</td>
<td>4</td>
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</tr>
</tbody>
</table>

**Note:** Psychology majors are required to take one course in each area.

**Knowledge** is the most strongly weighted goal for core content courses, which are designed to ensure that students receive a common understanding of the breadth of the discipline. The next highest rated goal, **Application**, emphasizes the significance of the material for understanding a variety of real world phenomena. The final 2 goals, **Ethics/Values** and **Interpersonal Relations and Communication**, are each rated less highly because of the challenges in resources, time, and class size to emphasize these goals as well.

## D3. Core General Classes

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Knowledge</th>
<th>Application</th>
<th>Ethics/Values</th>
<th>Relations and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psy 3600</td>
<td>Psychological Statistics</td>
<td>4</td>
<td>4</td>
<td>3.5</td>
<td>3.5</td>
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<tr>
<td>Psy 3605</td>
<td>Statistics Laboratory</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Psy 3610</td>
<td>Research Methods</td>
<td>4</td>
<td>2.5</td>
<td>3.5</td>
<td>4</td>
</tr>
</tbody>
</table>

**Note:** Statistics is a prerequisite for Research Methods and Statistics Lab is a co-requisite for Research Methods.
For the Psychological Statistics and Research Methods class, **Knowledge** is weighted most strongly, reflecting the importance of the information students are learning in the class. Research Methods also strongly emphasizes **Interpersonal Relations and Communication**, largely because students work in groups, make oral presentations, and complete a research project, which is written using APA style. Psychological Statistics and Statistics Lab most strongly weight **Application** as students in both classes learn how to apply statistical principles to actual data. **Ethics/Values** are highly weighted in all of these core general courses, as they are critical in understanding and adopting the beliefs, values, and attitudes of psychological scientists. More than any other core course in the curriculum, students in these classes are apprentices who are learning the discipline in small and intimate classes. To ensure class environments that promote opportunities for the forms of interaction necessary to inculcate students with scientific beliefs, attitudes, and values, enrollments in Psychological Statistics and Statistics Lab are limited to 20 and 25 respectively, and to 15 in Research Methods.

### D4. High Impact Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Program Goals</th>
<th>Number</th>
<th>Title</th>
<th>Knowledge</th>
<th>Application</th>
<th>Ethics/Values</th>
<th>Relations and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psy 4380</td>
<td></td>
<td></td>
<td>Practicum</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Psy 4800</td>
<td></td>
<td></td>
<td>Projects and Research</td>
<td>4</td>
<td>3.5</td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>Psy 4830</td>
<td></td>
<td></td>
<td>Directed Readings</td>
<td>4</td>
<td>3.5</td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>Psy 4910</td>
<td></td>
<td></td>
<td>Senior Capstone</td>
<td>4</td>
<td>3.5</td>
<td>4</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**Note:** These courses are not required for Majors, although many junior and senior students enroll in them (see Table 1). These courses may also become the core of a senior capstone requirement.

The research-oriented high impact courses (PSY 4800, 4830, and 4910) most strongly weight **Knowledge**, which in these courses corresponds to knowledge of the research domain under study. Both **Applications** and **Interpersonal Relations and Communication** are also strongly weighted. The latter goal reflects the demand that students interact with their supervisor and employ professional ways of formally and informally communicating their work with their supervisor and others. The former goal emphasizes students’ use of their background knowledge in the discipline to critically evaluate existing and/or creatively produce new knowledge of the research domain. Finally and also relatively highly weighted in the research course, is the **Ethics/Values** goal which reflects students not only knowing, but also acting consistent with the beliefs, attitudes, and values of psychological science, including the importance of following APA ethical rules in treating participants.
Practicum highlights the importance of **Application** and **Ethics/Values** goals as students use their general background, and specific knowledge of the issues addressed in Practicum, to understand and act in the field as a quasi-professional who recognizes their roles and professional responsibilities. The other goals are deemphasized in order to focus on **Application** and **Ethics/Values**.

E. Assessment Plan

The assessment program of the Psychology department has two components. The first is an ongoing research program into the general abilities of psychology students and how they learn the discipline\(^3\). These student assessments are **indirect**, meaning they are based on non-classroom measures of and changes in students’ disciplinary attitudes, beliefs, values, knowledge, skills, etc. These assessments are aligned to department goals and the learning outcomes for those goals. This work has been ongoing over the past several years and generally contributes to the assessment of overall program goals. However the indirect assessment data are included in those courses specifically targeted by the research (see Amsel et al., 2014 for an example).

The second component assures the alignment of courses in the psychology curriculum to the department goals. This involves assessing direct measures of student learning outcomes in each class. These assessments used to grade students in the class and are developed by the faculty teaching the course. Only those assessments used for grading that are aligned to SLOs are reported. Faculty members were not required to coordinate on the same assessments to grade the same courses.

The assessment plan requires that each class be reviewed every four years or less. The four year rotation is designed to minimize the burden on faculty for the number of courses they are reviewing in a given year and to ensure that many faculty members are involved in the review each year. The plan involves the two-step processes beginning in the fall and ending in the spring of an academic year. During the Fall semester, faculty review the classes targeted for that year, including a) revisiting student learning outcomes (SLOs) defined for their course and assessing whether that class’ assessments and grading rubrics are optimally aligned to those outcomes, b) tracking students’ performance on

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\(^3\) Amsel, E., & Kay, T. (2008). *After Introductory Psychology: The next course preparing psychology freshmen and sophomores for undergraduate research*. In R. Miller, B. Beins, B. Rycek, M. Ware, E. Balcetis, R. Smith, & S. Burns (Eds.) *Promoting the undergraduate research experience in psychology.*


Amsel, E., Baird, T., & Ashley, A. (2011). *Misconceptions and conceptual change in undergraduate students learning psychology*, *Psychology Learning and Teaching*, 10, 3-10

selective assessments which aligned best to the outcomes, and c) retaining examples of student performance on targeted assessments which span the grade range.

The process of revisiting learning outcomes and assessing their alignment to class assessments will occur early in the fall semester for a course that is being reviewed. The tweaking of a course’s outcomes and assessments may result in a revision of the course evaluation in the curriculum grid above. Faculty are encouraged make editorial changes in the outcomes for the classes they are reviewing so that they can be better align to assessments and to change their assessments to better align them to the outcomes for the class. We consider this tweaking a key part of the philosophy of continual assessment.

To minimize the workload and maximize the reliability, faculty members were invited to code only a subset of items which they believe are the best exemplars of a given SLO learning outcome. However, motivated faculty members were free to code and assess all aligned assessments. The assessments coded included a) multiple choice items aligned to student learning outcome from Chi Tester or Canvas tests which students were given over the course of a semester, b) graded written assignments across the various different written exam questions (essay or short answer), online discussions, homework, or papers which students completed over the course of a semester, and c) other graded assessments (e.g., in-class group work, discussions, etc.) which tap additional outcomes not otherwise covered.

Finally, for each class reviewed, faculty members were asked to retain examples of student performance on assessments (likely of the b category above). Ideally, the assessments selected will be illustrative and representative of the grade range of the class. Student identification information will be redacted and the assessment will serve as artifacts available to those evaluating the department assessment.

E1. Schedule of Class Assessments

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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>PSY 1010</td>
<td>Introductory Psychology</td>
<td>x</td>
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<td>x</td>
</tr>
<tr>
<td>PSY 3600</td>
<td>Psychological Statistics</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 3605</td>
<td>Statistics Laboratory</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>PSY 3610</td>
<td>Research Methods</td>
<td>x</td>
<td></td>
<td></td>
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<tr>
<td>PSY 2730</td>
<td>Biopsychology</td>
<td>x</td>
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<td>NEU 2200</td>
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<td>PSY 3000</td>
<td>Child Psychology</td>
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<td>Abnormal Psychology</td>
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<td>PSY 3500</td>
<td>Human Cognition</td>
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<tr>
<td>PSY 3250</td>
<td>Conditioning and Learning</td>
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<td></td>
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<td>PSY 3430</td>
<td>Theories of Personality</td>
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<tr>
<td>PSY 3460</td>
<td>Social Psychology</td>
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Core Content Courses

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<tr>
<td>NEU 2200</td>
<td>Intro Neuroscience</td>
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<td>PSY 3000</td>
<td>Child Psychology</td>
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<td>Theories of Personality</td>
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<td>PSY 3460</td>
<td>Social Psychology</td>
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### Elective Courses

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Notes</th>
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<tr>
<td>PSY 2000</td>
<td>Interpersonal Relations</td>
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<tr>
<td>PSY 2370</td>
<td>Psychology of Women and Gender</td>
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</tr>
<tr>
<td>PSY 3020</td>
<td>Child &amp; Adolescent Psychopath.</td>
<td>x</td>
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<tr>
<td>PSY 3100</td>
<td>Psychology of Diversity</td>
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<tr>
<td>PSY 3200</td>
<td>Psych of Sport (HPHP x-listed)</td>
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<tr>
<td>PSY 3270</td>
<td>Motivation and Emotion</td>
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<td>PSY 3300</td>
<td>Applied Behavior Intervention</td>
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<tr>
<td>PSY 3550</td>
<td>Psychology of Consciousness</td>
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</tr>
<tr>
<td>PSY 3730</td>
<td>Perception</td>
<td>INF</td>
</tr>
<tr>
<td>PSY 3740</td>
<td>Drugs and Behavior</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4000</td>
<td>Advanced General</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4050</td>
<td>Evolutionary Psychology</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4090</td>
<td>History and Systems of Psychology</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4310</td>
<td>Intro to Counseling Theories</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4340</td>
<td>Skills &amp; Techniques of Counseling</td>
<td>NLO</td>
</tr>
<tr>
<td>PSY 4510</td>
<td>Industrial &amp; Organiz. Behavior</td>
<td>INF</td>
</tr>
<tr>
<td>PSY 4760</td>
<td>Tests &amp; Measurements</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4900</td>
<td>Selected Topics in Psychology</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4990</td>
<td>Seminar</td>
<td>x</td>
</tr>
</tbody>
</table>

### Experiential and Individualized Instruction Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 1050</td>
<td>Careers in Psychology</td>
<td>NLO</td>
</tr>
<tr>
<td>PSY 1540</td>
<td>Psychology of Adjustment</td>
<td>x</td>
</tr>
<tr>
<td>PSY 2010</td>
<td>Psych as a Science/Profession</td>
<td>x</td>
</tr>
<tr>
<td>PSY 2800</td>
<td>Projects and Research</td>
<td>x</td>
</tr>
<tr>
<td>PSY 2830</td>
<td>Directed Readings</td>
<td>x</td>
</tr>
<tr>
<td>PSY 2890</td>
<td>Cooperative Work Experience</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4380</td>
<td>Practicum</td>
<td></td>
</tr>
<tr>
<td>PSY 4390</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 4800</td>
<td>Projects and Research</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4830</td>
<td>Directed Readings</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4890</td>
<td>Cooperative Work Experience</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4910</td>
<td>Senior Capstone Research</td>
<td>x</td>
</tr>
<tr>
<td>PSY 4920</td>
<td>Conferences and Workshops</td>
<td>NLO</td>
</tr>
</tbody>
</table>

**NOTE:** *NLO* designates a class that we have no plans at the present time to teach so are considered to be classes that are no longer offered. *Inf* designates classes that are infrequently given and may not be given in the year that we are assessing that class. Arrangements will be made to assess Inf classes when they are being taught.

**F. Report of Assessment Results for 2013-2014**
This section includes all the assessments performed. The data address indirect measures of program-related student learning outcomes and direct and indirect measures of core general courses, notably the statistics – methods course sequence.

F1. Evidence of Learning: Program Outcomes

Two new assessments address program related goals. The first was new cohort of graduating seniors whose questionnaire responses are evaluated and compared to two other cohorts from the last decade. A second indirect assessment of program related outcomes were students’ ETS Field test scores which provide a direct comparison between WSY Psychology students’ performed again a targeted set of students in similar programs and to all students taking the ETS Field test in psychology.

F1.a Graduating Senior Survey

One general program-level assessment performed assessed graduating seniors’ judgments, attitudes, and experiences (See Appendix 1). Previous analyses has compared students who graduated prior to 2006 (N = 135, M = 2004, and designated as the 2004 cohort) with those who graduated after 2007 but before 2012 (N = 128, M = 2009, and designated as the 2009 cohort). The present analysis focus on those who graduated after 2012 (N = 122, M = 2014, and designated as the 2014 cohort).

Judgments of Satisfaction, Rigor and Educational Quality: Students in the 2014 cohort rated the overall academic standards of the department on scale from poor (1) to excellent (5). Overall ratings of academic standards (M = 4.31) were high and there were no difference between the cohorts. The students additionally rated their satisfaction with their Psychology and General Education classes on a scale from definitively unsatisfied (1) to definitively satisfied (5). The 2014 cohort rated themselves as more satisfied with Psychology (M = 4.39) than General Education (M =3.79) classes reflecting the same pattern seen in earlier cohorts.

Figure 2: Graduating Seniors Satisfaction Ratings of Gen Ed and Psychology Classes by Cohort
The cohort's positive ratings of both their satisfaction with and standards of their psychology courses paralleled their positive ratings for being prepared for graduate school ($M = 3.86$) and willingness to repeat the major, if choosing a major again ($M = 4.33$). Moreover, these ratings were largely inter-correlated even after removing variance associated with Gender, Overall GPA, and Psychology GPA (see Table 1), suggesting that these questions tap a common underlying variable, which we call *Educational Quality*.

**Table 1: Partial Correlation Coefficients for Graduating Seniors' Assessments of Educational Quality, Controlling for Gender and University and Departmental GPA.**

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction with Psychology Major</th>
<th>Choose Psychology Major Again</th>
<th>Preparation for Graduate School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose Psychology Major again</td>
<td>.29**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparation for Graduate School</td>
<td>.43**</td>
<td>.29**</td>
<td></td>
</tr>
<tr>
<td>Satisfaction with Academic Standards</td>
<td>.62**</td>
<td>.14*</td>
<td>.38**</td>
</tr>
</tbody>
</table>

Note: * $p = .07$ 1-tail, ** $p < .001$

The Educational Quality variable was created by the extraction of the major factor that emerged in a factor analysis of the four ratings. The variable accounted for 41% of the variance, and each student was assigned a score based on the item loadings on the factor,
with an overall mean of the Educational Quality of $M = 0.00, \text{sd} = 1.00$). A positive score on the variable represents students’ perception that their psychology education was above average in quality. That is, they perceive their education as having high standards which effectively prepares them for graduate school, and about which they are so satisfied that they would repeat it if making a choice of a major again. A negative score reflects a below average perception of their psychology education. There was a slightly lower than average view of the educational quality of the psychology department in the 2014 compared to the 2009 cohort, but neither was different than the 2004 cohort (see Figure 2).

**Figure 2: Average Factors Scores of Graduating Seniors’ Educational Quality Judgments by Cohort.**

![Figure 2](image)

The reasons for the drop are unclear but likely due to the department being stretched thin. In the last five years we have had increasing enrollments with decreasing number of full-time faculty members due to retirements or voluntary separations. The SCH/FTE ratio in the department has almost doubled from 833 in 2008-2009 to 1443 in 2012-2013. Because of the situation, the department made use of many more adjunct and one-year replacement faculty. The full time faculty members could not provide all the mentoring and tutoring to students central for a complete education in the department. Moreover, more students also had much more contact with contract faculty who were not experienced (or paid) to provide the appropriate tutoring and mentoring experiences.

Despite being lower relative to the 2009 cohort, the judgments of the 2014 cohort of graduating seniors on the 4 questions constituting the Equational Quality measure are relatively high, averaging 4.1 / 5 across all four questions. The findings suggest that like the other cohorts, the most recent group of graduating seniors described think that they are receiving a rigorous training in their psychology major, which has high standards and prepares them well for graduate school. They generally have no regrets about their investment in the psychology major, as they would choose the same major if they had to do it all over again. Throughout the rest of this analysis, the composite Educational Quality variable will be correlated with the 2014 cohort students’ perceptions of their acquisition of other targeted skills and abilities in the department. These correlations assess whether the more recent cohort of students’ judgments of their acquisition of program-related skills and abilities contributes to their overall satisfaction with their education.
**Growth of Research Skills and Critical Activities:** The 2014 cohort of graduating seniors were assessed for their growth of research skills, a critical aspect of the Knowledge (1.1), Application (2.1), and Values/Ethics (3.1) student learning outcomes. The average rating of improvement in research skills (to design studies, collect, data, and analyze results) due to experiences in the department was 4.42 on a 1 (not at all) to 5 (a lot) scale. Most graduating majors (81%) from the 2014 cohort rated their research abilities as having improved substantially (a score of 4 or 5 on the 5 point scale) due to experiences in the psychology department. The composite Educational Quality score was positively correlated with self-reported improvement of research skills ($r = .45, p < .001$) independently of Gender, University GPA, and Psychology GPA.

Moreover, the expectation that improved research skills would help students improve their skills in critical reading, writing, and thinking was confirmed. Graduating seniors rated themselves as having improved their Critical Thinking, defined as the ability to think through problems and develop one’s own ideas and perspectives on psychological issues ($M = 4.45$), Reading Comprehension, defined as grasping the material one reads ($M = 4.20$), and Written Communication, defined as expressing yourself on paper ($M = 4.15$). There were positive and significant relations between self-reports of the improvements of research skills and improvements in writing ($r = .26, p < .01$), reading ($r = .36, p = .001$), and thinking ($r = .40, p = .001$) in the discipline. The data are interpreted as evidence of students’ self-reported increase of a range of scholarly skills central to them as writers, readers, and thinkers about psychological research.

**Judgments of Application:** Application of psychological knowledge is a key element of student learning outcome 2.1. The 2014 cohort rated their improvement in their ability to apply psychology, defined as the ability to find real world relevance of theory and research. Students’ average ratings were high ($M = 4.47$) on a scale from not at all (1) to a lot (5). Moreover, their application ratings were positively correlated with the composite Educational Quality variable, $r = .45, p < .001$, independently of Gender, University GPA, and Psychology GPA. These findings suggest that students rated themselves as improving in their ability to apply psychological theory and research to real world social issues and the more they did so, the more they rate the department as providing a quality education.

**Judgments of Personal (Self and Career) Knowledge:** Student learning outcome 2.2 focuses on students learning how to use their psychology education to promote their personal development and career planning. The 2014 cohort were asked whether the Psychology Department helped promote their career preparation (defined as preparation for graduate school or a job). Again, the same 5-point scale was used ranging from not at all (1) to a lot (5). The Career Planning question was answered positively but less so than other questions ($M = 3.91$), although responses to the question were positively correlated with the Educational Quality variable ($r = .61, p < .001$), independently of Gender, University GPA, and Psychology GPA. These findings were interpreted as evidence that students value career planning aspects of their experience as psychology majors.
Judgments of Ethical Reasoning: The cohort also rated the extent to which experiences in the Psychology Department promoted their ethical reasoning skills, defined as an ability to behave appropriately in professional and personal circumstances. Such a skill is central to student learning outcome 3.2. Students rated the question positively (M = 4.34) on the 1 (not at all) to 5 (a lot) scale, and those ratings were positively correlated with the composite Educational Quality variable (r = .36, p < .01).

Judgments of Oral and Written Communication Skills: The 2014 graduating senior cohort rated the extent to which their experiences in the Psychology Department promoted their oral and written communication, central to outcome 4.1. Students rated themselves positively (M Oral = 4.08, M Written = 4.15) on the 1 (not at all) to 5 (a lot) scale. The two ratings were positively correlated to each other (r = .55, p < .001), and each is positively correlated to the composite Educational Quality variable (Oral r = .28, p < .001; Written r = .48, p < .001), independently of Gender, University GPA, and Psychology GPA. We interpret these data as evidence of student believing that they achieved key outcomes, which will be documented more systematically in class-related assessments of APA-style presentations and papers in Research Methods and related classes.

Judgments of Interpersonal Relations: The 2014 cohort of graduating seniors rated the extent to which their experiences in the Psychology Department promoted their interpersonal relationships skills. Student ratings were positive (M = 4.23) on a 1 (not at all) to 5 (a lot) scale, and they were positively correlated to the composite Educational Quality variable (r = .33, p < .05), independently of Gender, University GPA, and Psychology GPA. The data are interpreted as partial evidence of students improving their skills to work with others.

F1.b ETS Psychology Test Performance.

Over the past 3 years (Since Fall 2011), graduating seniors were invited to test their knowledge of Psychology generally and their knowledge of specific domains of psychology in a standardized, 140 item ETS Psychology Field Exam. The exam assesses graduating seniors’ learning in such domains in psychology as Memory/Cognition, Perception/Sensation/Physiology, Developmental, Clinical/Abnormal, Social, and Measurement/Methodology. The ETS test provides the program-level evidence for student learning outcome 1.2 which addresses their understanding and synthesis of the domains of, and approaches to, scientific psychology.

At the end of each semester, students were offered an opportunity to take the ETS test in exchange for a chance of winning a Kindle Fire. Over this time, a total of 23 students took the exam (the sample) which represents about 10% of the all graduating seniors of over that time. The sample may not be representative of population of graduating seniors. More than two thirds of the sample had Psychology and University GPAs above 3.5 (the

\[\text{For more information see } \text{http://www.ets.org/mft/about/content/psychology.}\]
percentage for the 2014 cohort was 50% and 37% respectively). Moreover, the sample had proportionally more males (46%) than the cohort (35%). However approximately two-thirds of the sample and the cohort were aiming to complete a graduate or professional degree.

Although perhaps not representative of WSU graduating seniors from psychology, the 23 students who completed the test performed remarkably well. Their average overall ETS score ($M = 175$, $SEM = 2.76$) was higher than a sample of students in 10 comparison schools ($M = 163$, $SEM = 2.25$), with the WSU students categorized as in the 90th percentile of scores in that comparison. The 10 comparison schools included those of similar size (student body and faculty) and those with similar entering student characteristics. The average overall ETS score of the sample were also substantially higher than the average overall ETS score of all students from 365 school ($M = 154$, $SEM = .50$), with WSU students representing the 98th percentile of those scores.

ETS has also provided data about the WSU student sample performed on individual assessment indicators, defined as particular subject areas. Typically these areas have 15 questions and performance is reported as a percent correct. WSU students’ performance was substantially higher than the students in the specific and general comparison groups. The findings affirm this sample of students’ success in reaching student learning outcome 1.1, which emphasizes a range of knowledge that students are expected to know and a number of course-specific learning outcomes. Although perhaps a biased sample relative to our population, the conclusion is that our best students can be shown to be quite well trained.

Figure 4: WSU Graduating Seniors performance on the ETS Psychology Test Subscales with Comparison Groups.
F2. Evidence of Learning: High Impact Courses

The curriculum of the psychology department emphasizes engaging students in authentic activities through courses such as projects and research, directed readings, and practicum. As Table 2 documents, the pattern of student enrolment in these courses has remained relatively steady after a peak in 2011-2012. The decrease since then may be due to have less than a full number of tenure-track faculty members in the department.

Table 2: The enrollment of students in various individually supervised classes since the new compensation policy was introduced.

<table>
<thead>
<tr>
<th>Year</th>
<th>Projects and Research PSY 2800/4800/4910</th>
<th>Directed Readings PSY 4830</th>
<th>Practicum PSY 4380/4390</th>
<th>COOP Work PSY 2890/4890</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-2006</td>
<td>29</td>
<td>27</td>
<td>12</td>
<td>12</td>
<td>80</td>
</tr>
<tr>
<td>2006-2007</td>
<td>34</td>
<td>20</td>
<td>17</td>
<td>18</td>
<td>89</td>
</tr>
<tr>
<td>--------------</td>
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<tr>
<td></td>
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<td>10</td>
<td>9</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>20</td>
<td>21</td>
<td>15</td>
<td>92</td>
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<td>17</td>
<td>137</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>22</td>
<td>20</td>
<td>15</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>21</td>
<td>32</td>
<td>11</td>
<td>77</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>266</strong></td>
<td><strong>213</strong></td>
<td><strong>194</strong></td>
<td><strong>125</strong></td>
<td><strong>796</strong></td>
</tr>
</tbody>
</table>

One consequence of these activities is that students are having opportunities to present research at conferences, obtain grants for their research, and work in the community. Appendix 2 documents the success students are having in all three areas.

One notable source of evidence for students engaging in authentic activities with faculty is that students form closer and more significant ties with increasingly more faculty members. Over the past decade, graduating seniors have been asked to identify faculty members who have been particularly helpful in their experience in the psychology department. The number of faculty members identified has stabilized, having risen from 3.7 in the 2004 cohort to 4.4 in the 2009 cohort and 4.1 in the 2014 cohort. The significant cohort effect was due to the change in the number of faculty cited by the 2004 to 2009 cohort. The department takes results as a good indicator of quality interaction which is confirmed by finding that the number of faculty members identified is also positively correlated ($r = .20, p < .01$) to the composite Educational Quality variable, independently of Gender, University GPA and Departmental GPA.

The new program-related data were entered into the EOL spreadsheet for the department (See Appendix 3) and shared at various meetings where departmental faculty members offered feedback. The results of those discussions are included in the spreadsheet.

**F3. Evidence of Learning: Core General Courses**

The department’s three Core General Courses which fulfill the Statistics and Methods course requirements (PSY 3600, PSY 3605, and PSY 3610) were reviewed as part
of the assessment rotation. These assessments were completed in the Spring 2014 and the results were presented to the department in Fall 2014.

F3.1 PSY 3600: Psychological Statistics

Psychological statistics plays a central role in student learning to think like psychologists as understanding probabilistic reasoning is central to appreciating the value and limits of psychological theories and research. The course outcomes are listed below:

1. Knowledge.
   a. Understand statistical facts (central limit theorem), concepts (hypothesis testing), and processes (t-, z-, f tests)
   b. Compute key statistical analyses from a data set.
2. Applications
   a. Select and use the appropriate statistical test for a set of data.
   b. Conduct statistical analysis using computational techniques or programs to analyze data.
3. Values and Ethics
   a. Students will be skeptical regarding statistical conclusions.
   b. Recognize and adopt values consistent with statistical reasoning.
   c. Recognize ethical obligation to unbiasedly analyze and report data.
4. Interpersonal Relations & Communications
   a. Define key terms
   a. Write short answers
   b. Write reports demonstrating statistical knowledge, reasoning, and analyses

Indirect Measures: Several indirect measures address students’ acquisition of statistical reasoning skills tied to outcomes for the class. As reported above, graduating seniors self-reported having acquired methodological knowledge due to their experiences in the department, $M = 4.42$ on a 1 (not at all) to 5 (a lot) scale. The question broadly taps all outcomes including skills to design studies, collect data, and analyze results.

A Psychological Literacy assessment described in 2012-2013 Assessment Report addressed statistical reasoning. Students’ performance on a series of 10 multiple choice questions about methodology and design was assessed as part of the Psychology Methodology assessment. It revealed increases in performance over year students’ in school. It too provides evidence of students improving on all relevant class outcomes.

The ETS data also provides strong indirect evidence of the measurement and methodological competence of our graduating seniors. But the time they graduate, the students who completed the ETS field test in psychology were in the 77 percentile and significantly higher than the selective and more general comparison groups.

Direct Measures: Two faculty members coded their 3 courses during spring and summer semesters of 2014. For the purpose of the present assessment, the faculty coded chi-tester exams and applied or computational exams. Each chi-tester item (typically
multiple choice questions) was aligned to specific outcomes. The data reported (see Table 2 below) includes the number of exam items aligned to an outcome across multiple sections of the course, average grade for aligned items, and the percentage of students performing about the 70% criterion (bracketed). The applied or computational exams were globally aligned to outcomes so average performance across 8 exams the percentage of students scoring above 70% are reported for each aligned outcome.

Table 3: Evidence of Learning for Psychological Statistics Outcomes

<table>
<thead>
<tr>
<th>EOL</th>
<th>Multiple Choice Exams</th>
<th>Computational Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A:</td>
<td>163 items 73% (65%)</td>
<td></td>
</tr>
<tr>
<td>1B:</td>
<td>10 items 97% (92%)</td>
<td></td>
</tr>
<tr>
<td>2A:</td>
<td>57 items 70% (53%)</td>
<td>8 Exams 75% (67%)</td>
</tr>
<tr>
<td>2B:</td>
<td></td>
<td>8 Exams 75% (67%)</td>
</tr>
<tr>
<td>3A:</td>
<td>3 items 72% (56%)</td>
<td>8 Exams 75% (67%)</td>
</tr>
<tr>
<td>3B:</td>
<td>16 items 68% (58%)</td>
<td>8 Exams 75% (67%)</td>
</tr>
<tr>
<td>3C:</td>
<td>6 items 70% (48%)</td>
<td></td>
</tr>
<tr>
<td>4A:</td>
<td>27 items 86% (89%)</td>
<td></td>
</tr>
<tr>
<td>4B:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4C:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Faculty Discussion: The indirect measures provide evidence confirming learning statistical knowledge and skills. However, the direct assessments raise multiple concerns about the percentage of students above criterion, notably on outcomes 2A, 3A, 3B and 3C. Of particular concern is outcome2, which was considered central in the course by the faculty who teach it (see Curriculum Map). Outcomes 3 and 4 were judged as somewhat less of a priority. Also, faculty members teaching the course noted that performance on applied or computational exams decreased from the beginning to the end of the semester suggesting as more knowledge is acquired, the less students can apply that knowledge to new data sets.

Together the data suggest that class is effective for students. But it remains a challenge for many students in the class to effectively apply new statistical knowledge and skills. This is due to the fact that the research and design issues, to which the statistics knowledge and skills apply, are not introduced until a later course (PSY 3610, Research Methods).

One key outcome of the faculty discussion was the decision to fast-track a new combined Statistics-Research course (PSY 3615 and PSY3616) which would be presented to students as a preferred course sequence to complete the stat-methods requirement. The course is designed to better integrate statistical and methodological content in the same course. It was proposed that those teach the course the new course course will share and compare outcomes and assessments with the present statistics course to test whether the challenge students experience in 3600 is the lack of applicability of the statistical knowledge that they were acquiring.
F3.2 PSY 3600: Psychological Statistics Lab

Statistics Lab was created several years ago as a way to help students learn computer packages to apply statistics to data. The course outcomes are listed below:

1 Knowledge.
   a. Understand statistical facts (central limit theorem), concepts (hypothesis testing), and processes (t-, z-, f tests)
   b. Compute key statistical measures using statistical software.
2 Applications
   a. Select and use the appropriate statistical for a set of data.
   b. Conduct statistical analysis using computational techniques or programs to analyze data.
3 Values and Ethics
   a. Students will be skeptical regarding statistical conclusions.
   b. Recognize ethical obligation to unbiasedly analyze and report data
4 Interpersonal Relations & Communications
   a. Define key terms
   b. Write short answers
   c. Write reports showing understanding of statistical reasoning.

Indirect Measures: Again the same indirect self-report (Graduating Senior Questionnaire, multiple choice (Psych Literacy), and standardized (ETS) measures, described above are relevant to assessing students’ learning to use statistical software.

Direct Measures: Direct Measures: Three faculty members assessed their PSY 3605 course during spring 2014 semester. All faculty members had 3 exams and 9 (one faculty member) or 10 (2 faculty members) computational (homework) assessments. However, the student performance was coded differently, with one faculty aligning exam and computational assessments separately to specific student outcome, another doing the same but not distinguishing between the exam and computation assessments, and a third coding the exams and computational assessments separately, but aligning each globally to outcomes (e.g., Exam 1 was aligned to EOLs 1a, 1b, and 2a). The result is a combined analysis which averages students’ performance over the three sections (and methods of analysis) that is presented below. The data reported includes average grade for aligned items or overall assessments across tests and classes, and the average percentage of students performing about the 70% criterion (in brackets).

Table 3: Evidence of Learning for Statistics Lab Outcomes

<table>
<thead>
<tr>
<th>EOL</th>
<th>Multiple Choice Exams</th>
<th>Computational Exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A:</td>
<td>80% (86%)</td>
<td>81% (86%)</td>
</tr>
<tr>
<td>1B:</td>
<td>82% (71%)</td>
<td>83% (87%)</td>
</tr>
<tr>
<td>2A:</td>
<td>77% (58%)</td>
<td>78% (80%)</td>
</tr>
<tr>
<td>2B:</td>
<td>82% (90%)</td>
<td>82% (79%)</td>
</tr>
<tr>
<td>3A:</td>
<td>88% (72%)</td>
<td>88% (70%)</td>
</tr>
</tbody>
</table>
3B: 77% (71%) 77% (71%)
4A: 80% (81%) 81% (83%)
4B: 80% (73%) 80% (77%)
4C: 77% (72%) 77% (68%)

**Faculty Discussion:** Direct and indirect evidence seems to converge on students’ statistical knowledge and skills reflecting deeper grasp, improved application, greater embracing of ethics and values, and enhanced communication in PSY 3605. Students’ overall performance in PSY 3605 is above criterion for most assessments.

However, the averaging of performance across sections and tests hides sources of variability. For example, students performed much worse in one section than others, reflecting perhaps different levels of assessments or standards of performance. Discussion of this variability focused on better coordinating section of PSY 3605 with each other and to PSY 3600. Another idea was to standardize lectures online and allow students time at a lab staffed by the faculty member of record and class tutors. Additionally, other concerns would be addressed by a class that combines Statistics and Methods as such a course would additionally roll Stats Lab into its curriculum.

**F3.3 PSY 3600: Research Methods**

Perhaps no other course in the curriculum is as central to training students to think like psychologists as Research Methods. It is a four credit course which requires a substantial APA-style write up of a research project. The student learning outcomes for the course are listed below.

1. Knowledge.
   a. Understand methodological concepts (control groups, reliability) processes (e.g., sampling) and designs (e.g., Solomon 4 group)
   b. Identify unique features and processes of the scientific method
   c. Understand the process of designing new research.

2. Applications
   a. Critically evaluate research papers in outside their areas of interests.
   b. Critically evaluate findings reported in media.
   c. Describe the importance of research to one's professional career

3. Values and Ethics
   a. Adopt the beliefs, attitudes, and values necessary to be scientists.
   b. Recognize and adopt ethical obligations of a researcher.

4. Interpersonal Relations & Communications
   a. Complete a full APA-format research paper
   b. Students will orally present key research ideas.
   c. Students will work together in groups to design, execute and analyze a research project.

**Indirect Measures:** Again the same indirect self-report, multiple choice, and standardized measures, described above are relevant to assessing students’ acquiring
research knowledge and skills. Additionally, more indirect evidence comes from research on the students’ adoption of research-oriented values and attitudes from the course (see Amsel et al., 2014).

**Direct Measures:** Three faculty members assessed their PSY 3610 courses during spring 2014 semester. All faculty members had multiple assessments which included student performance on the APA final paper as the most significant assessment. For most these was performed in groups and each faculty reported the success of the group work (defined as a group generating a report). Faculty A also included an exam, oral presentation, two written reports (research proposal and a literature review) and a take-home final exam. Each assignment was aligned to outcomes and all data were reported quantitatively (as an average percentage) and qualitatively (as a percentage of students reported above 70%). Faculty B also included an oral presentation, 4 written reports (problem statement, literature review; methods/results, discussion), and a self-reflection paper. Each assignment was assessed separately for each relevant EOL and only quantitative data were reported. Finally faculty C included 3 exams (with items aligned globally to outcomes 1-4), multiple written reports (the proposal and drafts of final paper), with quantitative data reported. The data reported below were averaged across similar assignments in different classes.

**Table 5: EOL Outcomes for Research Methods**

<table>
<thead>
<tr>
<th>EOL</th>
<th>Exam</th>
<th>Oral Present</th>
<th>Reports</th>
<th>APA Paper</th>
<th>Other *</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A:</td>
<td>80% (76%)</td>
<td>91% (88%)</td>
<td>82% (86%)</td>
<td>87% (91%)</td>
<td>98% (100%)</td>
</tr>
<tr>
<td>1B:</td>
<td>81% (76%)</td>
<td>91% (88%)</td>
<td>82% (86%)</td>
<td>87% (91%)</td>
<td>98% (100%)</td>
</tr>
<tr>
<td>1C:</td>
<td>90% (100%)</td>
<td>91% (88%)</td>
<td>82% (86%)</td>
<td>87% (91%)</td>
<td>98% (100%)</td>
</tr>
<tr>
<td>2A:</td>
<td>80% (80%)</td>
<td>91% (88%)</td>
<td>82% (86%)</td>
<td>87% (91%)</td>
<td>98% (100%)</td>
</tr>
<tr>
<td>2B:</td>
<td>85% (82%)</td>
<td>87% (91%)</td>
<td>98% (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2C:</td>
<td>Deleted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3A:</td>
<td>89% (88%)</td>
<td>91% (88%)</td>
<td>82% (86%)</td>
<td>87% (91%)</td>
<td></td>
</tr>
<tr>
<td>3B:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4A:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4B:</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4C:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(94%)</td>
</tr>
</tbody>
</table>

* Includes other assessments (take home exam, reflection paper, or successful group work).

**Faculty Discussion:** Outcome 2c was deleted as a research methods class may not be the appropriate one to assess it. Other course in the curriculum addresses the issue more directly (e.g., PSY 2010). Faculty members concluded that the direct and indirect evidence converged on the conclusion that students are learning of the relevant research-related knowledge, skills, attitudes and values (ethical and scientific). Students’ overall performance in PSY 3610 is substantially above criterion for all assessments, but notably for the final required APA paper. The requirement was seen as the key learning experience which requires a range of competences in the research process. Faculty members were pleased with the result and further recognize that importance of research to help students...
learn to think like psychologists. Unlike PSY 3605, the averaging of performance across sections did not hide sources of variability as students performed substantially above citation on each assessment in each section.

G. Summary of Artifact Collection Procedure

Artifacts were collected as part of the Northwest Accreditation visit. Artifacts include final APA papers in PSY 3610 and are available on the WSU Psychology BOX account.

H. Please respond to the following questions.

1) Reflecting on this year’s assessment(s), how does the evidence of student learning impact your faculty’s confidence in the program being reviewed; how does that analysis change when compared with previous assessment evidence? To answer this question, compare evidence from prior years to the evidence from the current year. Discuss trends of evidence that increases your confidence in the strengths of the program. Also discuss trends of concern (e.g. students struggling to achieve particular student outcomes).

This was the first time discussing the core statistics–methods sequence of the curriculum. The data confirmed students’ success in learning the material as supported by both direct evidence of student learning outcomes from the classes and from indirect evidence based on self-report, objective, standardized measures of methodological knowledge and skills. However, direct evidence also revealed troubling limitations of students in the statistics classes. Without the background or understanding of how statistical knowledge is integrated with research, a significant minority of students were below threshold in a) fully grasping statistical facts, concepts, and skills, b) applying such knowledge, c) understanding the attitudes and ethics necessary to effectively use the knowledge, and) communicating the knowledge professionally. A newly designed courses (PSY 3615 – PSY 3616) alleviates the problem we think by presenting the relevant statistical and methodological knowledge together over the course of two semesters. The new course is set to be taught Summer 2015 or Fall 2015.

2) With whom did you share the results of the year’s assessment efforts?

The department members were presented all of the data that were described in the report and discussed it at length in a Fall 2014 at a monthly Faculty Development lunch.

3) Based on your program’s assessment findings, what subsequent action will your program take?

As noted above, the department has passed a new statistics–methods course sequence (PSY 3615-316) to address the issues. The faculty will agree to share assessment items to compare performance on the two class sequences. Also faculty teaching PSY 3605 would also share lectures and assessments to ensure consistency.
Appendix 1: Graduating Senior Survey

Please complete the following questions to the best of your knowledge.

Q1 Gender:
- Male (1)
- Female (2)

Q2 Year of Graduation:

Q3 Age:

Q4 Cumulative University GPA:

Q5 Psychology GPA:

Q6 Ethnicity:

Q7 What was your primary area of interest in Psychology?
- Biological (1)
- Cognitive/Behavioral (2)
- Abnormal/Therapeutic (3)
- Social/Developmental (4)

Q8 Explain in brief detail why you decided to major in psychology at Weber State University.

Q9 After choosing to major in psychology, what goals did you hope to accomplish through your studies? (Please select only one—the most important to you)
- Generalist education (1)
- Preparation for graduate school (2)
- Preparation for professional school (3)
- Preparation for employment (4)
- Preparation for life skills (5)
- Personal growth (6)
- Other (7) _______________
Q10 What are your plans/goals after receiving your Bachelor’s Degree? (Please check all that apply.)
☐ Employment (1)
☐ Graduate school in Psychology (2)
☐ Other graduate or professional school (3)
☐ Military Service (4)
☐ Volunteer service (5)
☐ Homemaker (6)
☐ Other (Please specify) (7) ____________________

Q11 Did you apply to graduate school?
☐ Yes (1)
☐ No (2)

Answer If Did you apply to graduate school? Yes Is Selected

Q12 If you applied to graduate school, please list the top 3 program(s) (Clinical Psychology, Counseling Psychology, Social Work, Neuropsychology) and 3 school(s) to which you applied. Please note the program to which you were accepted and will attend.

Answer If Did you apply to graduate school? No Is Selected

Q13 If you have not applied or been accepted, are you planning to apply to graduate school in the next 5 years? If so, please list the top 3 program(s) (Clinical Psychology, Counseling Psychology, Social Work, Neuropsychology) and 3 school(s) to which you plan to apply.

Q14 Imagine that you are just beginning your college education. Knowing what you know now, would you choose psychology as your major?
☐ 1 Definitely No (1)
☐ 2 (2)
☐ 3 Undecided (3)
☐ 4 (4)
☐ 5 Definitely Yes (7)

Q15 How satisfied are you with your education in Psychology at Weber State University?
☐ 1 Definitely Unsatisfied (1)
☐ 2 (2)
☐ 3 Undecided (3)
☐ 4 (4)
☐ 5 Definitely Satisfied (5)
Q16 How satisfied are you with your general education at Weber State University?
   ○ 1 Definitely Unsatisfied (1)
   ○ 2 (2)
   ○ 3 Undecided (3)
   ○ 4 (4)
   ○ 5 Definitely Satisfied (5)

Q17 Do you believe that your education in the Psychology Department at Weber State University prepared you for graduate school?
   ○ 1 Definitely No (1)
   ○ 2 (2)
   ○ 3 Undecided (3)
   ○ 4 (4)
   ○ 5 Definitely Yes (5)

Q18 How would you rate the overall academic standards of the Psychology department?
   ○ 1 Poor (1)
   ○ 2 (2)
   ○ 3 Average (3)
   ○ 4 (4)
   ○ 5 Excellent (5)

Q19 How much did your experience in the Psychology Department help you develop your skills in the following areas?

Q20 Oral communication (your ability to express yourself verbally)
   ○ 1 Not at all (1)
   ○ 2 (2)
   ○ 3 Somewhat (3)
   ○ 4 (4)
   ○ 5 A lot (5)
   ○ N/A (6)

Q21 Written communication (your ability to express yourself on paper)
   ○ 1 Not at all (1)
   ○ 2 (2)
   ○ 3 Somewhat (3)
   ○ 4 (4)
   ○ 5 A lot (5)
   ○ N/A (6)
Q22 Reading comprehension (your ability to grasp the material you read)
- 1 Not at all (1)
- 2 (2)
- 3 Somewhat (3)
- 4 (4)
- 5 A lot (5)
- N/A (6)

Q23 Conceptual reasoning (your ability to think through problems and develop your own ideas and perspectives on psychological issues)
- 1 Not at all (1)
- 2 (2)
- 3 Somewhat (3)
- 4 (4)
- 5 A lot (5)
- N/A (6)

Q24 Information technology (your ability to effectively use technology)
- 1 Not at all (1)
- 2 (2)
- 3 Somewhat (3)
- 4 (4)
- 5 A lot (5)
- N/A (6)

Q25 Interpersonal relationships (your skills to deal with others)
- 1 Not at all (1)
- 2 (2)
- 3 Somewhat (3)
- 4 (4)
- 5 A lot (5)
- N/A (6)

Q26 Research (your ability to design studies, collect data, analyze data, etc.)
- 1 Not at all (1)
- 2 (2)
- 3 Somewhat (3)
- 4 (4)
- 5 A lot (5)
- N/A (6)
Q27 Ethical reasoning (your ability to behave appropriately in professional and personal circumstances)
- 1 Not at all (1)
- 2 (2)
- 3 Somewhat (3)
- 4 (4)
- 5 A lot (5)
- N/A (6)

Q28 Application of theory and research (your ability to find real world relevance of theory and research)
- 1 Not at all (1)
- 2 (2)
- 3 Somewhat (3)
- 4 (4)
- 5 A lot (5)
- N/A (6)

Q29 Career preparation (your preparation for graduate school or a job)
- 1 Not at all (1)
- 2 (2)
- 3 Somewhat (3)
- 4 (4)
- 5 A lot (5)
- N/A (6)

Q30 Briefly describe your best and worst educational experience in the Psychology Department
Q31 From this list, please check any of the Psychology faculty you found to be particularly helpful to your experiences at Weber State University. Please select all that apply.

- Eric Amsel (1)
- Aaron Ashley (2)
- Todd Baird (3)
- Norris Bancroft (Now retired) (4)
- Lauren Fowler (5)
- Azenett Garza (6)
- Richard Grow (Now retired) (7)
- Joseph Horvat (8)
- Theresa Kay (9)
- Maria Parrilla de Kokal (10)
- Melinda Russell-Stamp (11)
- Matthew Schmolesky (12)
- Leigh Shaw (13)
- Other (please list) (14) ____________

Q32 How much do you agree with the following statements?

Q33 The Psychology Adviser helped me understand the graduation requirements for the Psychology Major/Minor

- 1 Not at all (1)
- 2 (2)
- 3 Somewhat (3)
- 4 (4)
- 5 A lot (5)
- N/A (6)

Q34 The Psychology Adviser showed me useful resources in CatTracks.

- 1 Not at all (1)
- 2 (2)
- 3 Somewhat (3)
- 4 (4)
- 5 A lot (5)
- N/A (6)
Q35 The Psychology Adviser treated me with respect.
1 Not at all (1)
2 (2)
3 Somewhat (3)
4 (4)
5 A lot (5)
N/A (6)

Q36 The Psychology Adviser answered my questions.
1 Not at all (1)
2 (2)
3 Somewhat (3)
4 (4)
5 A lot (5)
N/A (6)

Q37 The Psychology Adviser directed me to those who could offer me career and graduate school advice.
1 Not at all (1)
2 (2)
3 Somewhat (3)
4 (4)
5 A lot (5)
N/A (6)
Appendix 2: Students Presentations and Publication (2013-2014)

Publications

Presentations

RMPA


NCUR


session presented at the National Conference on Undergraduate Research, Lexington, KY.


UCUR


WSU CCEL Conference


**Student Grants (Total $18,000)**
- OUR Travel: Trisha Dirks (Amsel), Trisha Dirks (Russell Stamp), Max George (Fowler), Daniel Linford (Schmolesky) Lisa Hornsby (Fowler), Houda Nazim (Schmolesky)
- OUR Research: Eric Bitton (Baird), Ben Eschler (Ashley), Sterling Haws (Fowler), Trey Mendenhall (Schmolesky), Houda Nazim (Schmolesky)

**Community Service**
- Youth Impact: Logan Allen, Regina Griffiths, Nathan Johnson, Kai Mendenhall, Sara Sadeghi Lacey Miller, Anthony Romero, Kallie Spackman, David Johnson, Alexander Werner
- Treehouse: Alison Findley, Rachael Dixon, Deanne Paulsen, Jessica Salazar
- Teaching Assistant: Benjamin Eschler, Shealyn Kwan-Smith
- DaVinci Academy: Lanice Galloway
- OUTreach: Sarah Moore, Tiffany Paquet, Anna Tremont