



University of Nevada, Reno

Program Review Self-Study

**Department of Psychology
University of Nevada, Reno**

Fall 2015

Department Cover Sheet

Title of Program
Department of Psychology

College or School
College of Liberal Arts

Department Chair or program administrator

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Part I: Program History, Mission, and Administrative Structure

I.1 Program History

In the late 1950s independent departments were created from the Department of Anthropology, Psychology, and Sociology, and the new Department of Psychology quickly grew to a faculty FTE of 10 by the mid 1960s. An interdisciplinary Ph.D. program in Social Psychology (with the new Department of Sociology) and a department Ph.D. program in General Psychology were launched in the early 1960s, with the first Ph.Ds. awarded in Psychology in 1966. At this time the department also offered a B.A. degree in both social psychology and general psychology. This level of specialization for undergraduates was later deemed to be unnecessary and was discontinued. The Ph.D. program in General Psychology allowed students to specialize in either Clinical or Experimental. By the early 1970s the graduate specialization in Clinical Psychology achieved official recognition and accreditation by the American Psychological Association. The undergraduate major was re-designed to provide more direction for students interested in careers in psychology (Graduate Preparation Track), compared to students interested in psychology primarily to fulfill requirements for a liberal arts major (Liberal Arts Track). This new option first appeared in the 1997/98 UNR catalogue.

During the 1990s a new specialization in General Psychology at the Ph.D. and M.A. levels was added in Behavior Analysis, with program accreditation by the Association for Behavior Analysis granted in 2000. A satellite program in offering a M.A. degree in Behavior analysis was initiated in 1995. Because this satellite program is separate from the department as a whole and international in scope, it will be described in discrete sections throughout this program review.

In 2007 the name for the Experimental Program was changed to Cognitive and Brain Sciences (CBS) in order to better reflect future direction and faculty expertise. This change ushered in an era of expanding neuroscience research in the department and the University. In 2008, a new Neuroscience (BS) degree option was launched, in a collaborative effort between Psychology and Biology. It has grown to be a very popular major currently counting over 360 students. In 2012, a large institutional development grant (Centers of Biomedical Research Excellence- COBRE) was landed by one of our Psychology faculty members (Michael Webster- PI) and resulted in the establishment of the Center for Integrative Neuroscience (CIN) that now spans several colleges and departments at UNR. In 2015, an interdepartmental PhD program in Neuroscience bridging Psychology and Biology, was implemented in response to the need for advanced training in Neuroscience. The CBS faculty in Psychology teach for the undergraduate and graduate degrees in Neuroscience and participate in the CIN. The recognition of Neuroscience as a strength and important research investment has resulted in the commitment of faculty “cluster” hires and other resources to the future development of Neuroscience.

In addition to the interdisciplinary undergraduate B.S. degree in Neuroscience, and a minor degree, the department of Psychology now has 3 major undergraduate degree tracks: the B.A. General Degree, the B.A. Research Specialization, and the B.A. Behavior Analysis. The B.A. with Behavior Analysis specialization degree was added in 2015 with the specific intent to provide specialized training in Behavior Analysis techniques in preparation for advanced graduate training or paraprofessional careers in human service. In total, there are currently more than 820 Psychology majors. The Psychology Department faculty roster now comprises 22 tenure-track faculty members plus one lecturer and one non-tenure track assistant professor. The department has approved positions to be filled in 2016 that should put the roster at 26 tenure-track faculty and two lecturers.

The field of psychology includes myriad research and teaching topics, which contribute to a fragmented identity. Defining psychology at the University of Nevada is no exception and results in at least three identities determined by faculty and student association with our three main graduate programs (Clinical, Behavior Analysis, and Cognitive and Brain Sciences) and our two interdisciplinary graduate programs (Neuroscience and Social Psychology). The inherent problem is illustrated by the fact that considerable discussion was focused on the appropriate placement of Psychology when the College of Arts and Sciences was split into separate Colleges of Liberal Arts (CLA) and the College of Sciences in 2003/04. Psychology was placed in CLA (where it has received strong support), despite the fact that a majority of the faculty had stated that our identity was more closely linked to the natural sciences. While Psychology has been well treated in the CLA, the topic of our placement continues to be an item of discussion in the department.

Satellite Program In Behavior Analysis

The Satellite Programs in Behavior Analysis were founded in 1995 to meet the demand for behavior analytically trained providers of services for persons with autism and other developmental disabilities. The impetus for the development of these programs came from four sources:

- 1) An increasing prevalence of children on the autism spectrum, presently 1 in 57 live births;
- 2) The unmatched efficacy of behavior analytic approaches to the treatment of childhood autism creating significant demand for practitioners with this training;
- 3) The establishment of professional credentialing for behavior analytic practitioners, with implications for licensure and insurance;
- 4) The small number of training programs in behavior analysis in the US and elsewhere, with fewer still accessible to fully employed human service workers in immediate need of this training.

To meet this demand, the Satellite Programs in Behavior Analysis were initiated in 1995, and have been in continuous operation since that time. The Satellite Programs include the full Master of Arts degree, as well as course sequences and practical training regimes pursuant to professional credentialing by the Behavior Analysis Certification Board. The satellite programs are delivered to staff members of sponsoring human service agencies

through educational service agreements between the sponsoring agency and the University.

Since 1995, these programs have been delivered to multiple cohorts of students in several US states and other countries. The regions served by the Satellite Programs, their sponsors and dates of operation are shown below.

Master's Degree Programs:

1995-98	Sponsor: Trinity Services, Inc., Illinois.
1998-02	Sponsor: Trinity Services, Inc., Illinois.
2000-03	Sponsor: Behavior Analysis, Inc., Florida.
2001-04	Sponsor: CARD, Inc., California.
2002-05	Sponsor: Judevine Center for Autism, Inc., Missouri.
2002-05	Sponsor: Behavior Institute, Inc., Canada.
2005-08	Sponsor: CARD, Inc., California.
2005-08	Sponsor: Judevine Center for Autism, Inc., Missouri.
2005-08	Sponsor: SEEK Education Inc., California
2009-12	Sponsor: SEEK Education, Inc., California
2014-16	Sponsor: Easter Seals of Southern California

Graduate Non-Degree Programs

2014-15	Sponsor: Easter Seals of Southern California
2014-16	Sponsor: King Faisal Specialist Hospital & Research Center, Saudi Arabia
2015-17	Sponsor: King Faisal Specialist Hospital & Research Center, Saudi Arabia

Undergraduate Non-Degree Programs:

2005-06	Sponsor: Washoe County School District, Nevada.
2006-07	Sponsor: Washoe County School District, Nevada.
2006-07	Sponsor: CARD, Inc., California.

In addition to these programs, support for training in behavior analysis was provided to the Jordan University of Science and Technology (JUST). Through this collaboration, 45 Jordanian nursing students achieved master's degrees over the period from 2002-2008. These degrees were awarded by JUST, however academic coordination, curricular oversight, instructor and practical training supervisor selection and management were handled through UNR's Satellite Programs.

Over the period of the present review, satellite programs have been delivered under the sponsorship of three entities including: SEEK Education, Inc., Easter Seals of Southern California, and the King Faisal Specialty Hospital and Research Center, Saudi Arabia. The data contained in this report pertain to these three programs.

I.2 Mission

The following mission statement was updated by the Department in 2008.

The Mission of the Department of Psychology

The Department of Psychology offers undergraduate and graduate degree programs and supports scholarly research and creative activity in the social and natural sciences.

Contributing to their own disciplines, as well as the core curriculum and the honors program, department faculty are committed to providing University undergraduates with a broad general education and to ensuring that students in the department master the field of Psychology. Through rigorous academic preparation, faculty train graduate students to conduct original scholarly research and to launch successful professional careers. The Department wants its faculty and students to appreciate the vitality, relevance, and continual flux of the numerous disciplinary and interdisciplinary activities of the department. Instruction in the department is based on the most recent scholarly developments and trends, and incorporates effective and relevant pedagogical innovations.

The department is committed to scholarly research and creative activity and supports the efforts of its faculty and students to advance the frontiers of knowledge. The value of such work is recognized in publication, performance, and competitive grants and awards. Department faculty and students engage in collaborations within the department and across departments and colleges with scholars, clinicians and scientists outside the university, and with members of the community at large.

The service given by faculty and students to the department, their specialties and programs, and the University is a consequence of the centrality that they accord to learning and scholarship, since active service ensures the quality and vitality of educational programs. Reaffirming the university's mission as a land-grant institution, faculty and students donate their time, energy, and professional expertise to the region, state, nation, and world.

Satellite Program in Behavior Analysis

The mission of the Satellite Programs mission, in keeping with the mission of the Department and the University as a whole, is the advancement and dissemination of knowledge that will help to improve society at the state, regional and national levels.

More uniquely, the mission of the Satellite Programs is to meet the need for training in behavior analysis wherever such training is unavailable or inaccessible to fully employed human service workers, with the aim of developing a competent workforce for the human service sector.

I.3 Administrative Structure and Objectives

1.3.a- Administrative Structure

Our department's administrative structure has remained relatively stable over the years and we continue to endorse the practice of self-governance. We work hard to balance the autonomy of our three program areas with the overall needs of the department. We have bylaws that are in close accordance with policy and procedure that has evolved over the years and we continue to review a number of departmental policies such as budget management and the merit review process. We have plans to update our bylaws as soon as the University and College bylaws have been revised. The department bylaws must be consistent with those of the University and College.

The department is composed of faculty who carry out the scholarly, educational, service and related missions of the department. The faculty consists of all full-time and part-time academic and administrative faculty who hold authorized positions as defined in the University of Nevada, Reno Bylaws. Specifics regarding roles and responsibilities are addressed in Part IV of this document.

Chair: The College of Liberal Arts bylaws describe the duties of the department chair as implementing college policy and procedures under the direction of the Dean. Additionally, according to the 2008 Psychology Bylaws, "The chair shall be responsible to the faculty of the Department of Psychology for advancing the mission of the department and for executing and implementing Department Bylaws and approved faculty actions. The Chair shall lead the faculty in curriculum and program planning, encouraging scholarly and creative development appropriate to the specialties among faculty and students alike." The Chair may appoint an Associate Chair to assist the Chair in conducting Department business. The Associate Chair shall be a tenured member of the Department faculty.

Programs: Department faculty are grouped into programs, specialties, interdisciplinary programs, non-instructional research components, and service components for educational and administrative purposes. Currently, faculty are grouped according to three general Programs: (1) The Clinical Psychology Program, (2) The Cognitive and Brain Sciences Program, and (3) The Behavior Analysis Program. The clinical Program also operates a Psychological Services Center (PSC). The Behavior Analysis program also operates a satellite program that is described separately in the following sections. All of the CBS faculty also participate in the interdisciplinary Neuroscience undergraduate major and Neuroscience graduate program. In addition, we currently have one faculty member who is a member of the interdisciplinary Social Psychology Program but are not affiliated with any of the three main Programs. There is a director for each program. As stated in the bylaws, "Program Directors shall be responsible to the Chair for implementing Department policies and procedures, and responsible to faculty for implementing program policies and procedures. Program Directors shall serve as liaisons between the Chair and the Department faculty, informing faculty of actions taken by the Chair and the Executive Committee." Chairs and Directors serve three year terms and may be elected to additional terms. In addition to the directors of the main programs and interdisciplinary neuroscience degree and graduate program, there is also a Director for

Psychological Services (clinic) and a Director of the COBRE Center for Integrative Neuroscience. The current leadership includes:

Michael Crognale, Chair

Patrick Ghezzi, Associate Chair

Ramona Houmanfar, Director Behavior Analysis

Anthony Papa, Director Clinical Psychology

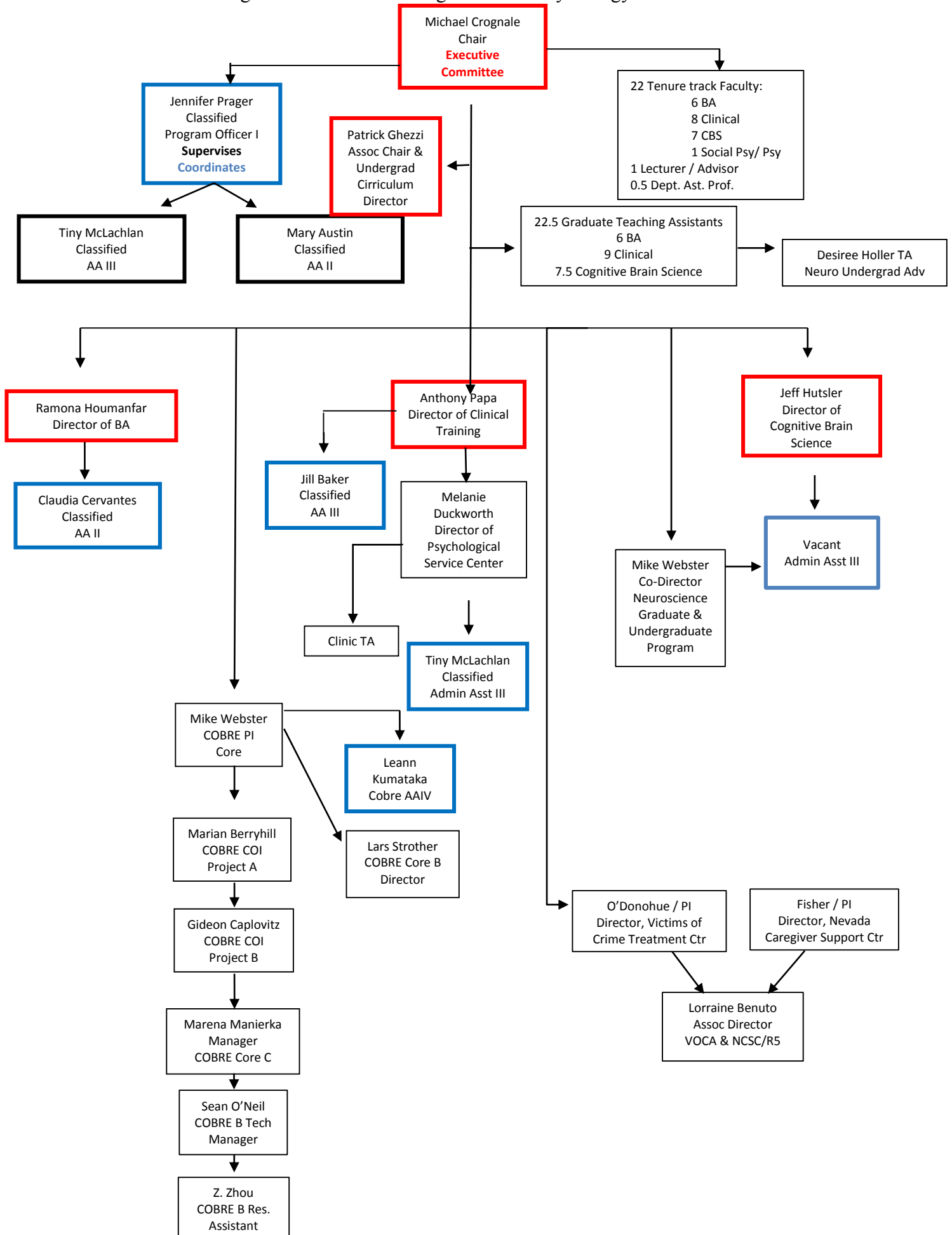
Jeffrey Hutsler, Director Cognitive Brain Science

Melanie Duckworth/ Bill O'Donohue, Co-Directors Psychological Service Center

Michael Webster, Director COBRE Center for Integrative Neuroscience and co-director of the Undergraduate Neuroscience degree and Graduate Neuroscience programs.

Linda Hayes- Director Satellite Programs in Behavior Analysis

Fig. I.1 Administrative Organization –Psychology Fall 2015



The history of the change in leadership since the last Program review in 2008 is shown below:

2008-2011

Follette, V - Chair
 Webster - Assoc Chair
 Williams - Behavior Analysis Dir
 Follette, W - Clinical Dir
 Crognale - CBS Dir
 Duckworth - PSC Dir

2011-2013

Follette, V - Chair
 Webster - Assoc Chair
 Houmanfar - Behavior Analysis Dir
 Follette, W - Clinical Dir
 Crognale - CBS Dir
 Duckworth - PSC Dir

2013-2015

Follette, V - Chair
 Hutsler - CBS Dir

 Houmanfar - Behavior Analysis Dir
 Hayes, S - Clinical Dir
 Crognale - Assoc Chair
 Papa - PSC Dir
 Webster- COBRE Dir; neurosci. Co-Dir

Department of Psychology Administration

	Role Statement Percentage for Service	Course Reassignment (per semester)	Stipend (per year)
Chair	50%	1.5 courses	\$12,500 + 1 month salary
Director of Clinical Training	40%	1 course	\$6,000
Director of Behavior Analysis	40%	1 course	\$5,000
Director of Cognitive Brain Science	20%	1 course	\$5,000
Director of Psychological Services Center	35%	1 course	\$8,000
Director of COBRE Center for Integrative Neuroscience	10%	1 course	\$8,000
Director of undergraduate and graduate Neuroscience	10%	none	none

Executive Committee

The Executive Committee is the primary committee in the department. This committee reviews issues of budget, planning, and policy. The Executive Committee has no direct decision making power but advises the Chair and the department. All major changes are normally considered by the Executive Committee before review by the department. The Executive Committee comprises the directors of the graduate training programs inside the department, the Chair, and the Associate Chair. The directors are elected by faculty in their programs, subject to approval by the Chair. The Chair is elected by the department faculty, subject to approval by the Dean. The Associate Chair is appointed by the Chair

and approved by the faculty. According to our prior bylaws, the Associate Chair was to be selected from one of the graduate directors, however this was changed in our recent bylaw revision. In order to provide for broader representation and to better distribute workload, the Associate Chair is not required to be one of the graduate directors.

Bylaws Committee

The Department Bylaws Committee prepares for consideration by the Chair and the Department faculty any revisions in the Department Bylaws. The Committee reviews and advises the Chair regarding departmental Bylaws or their proposed amendments. The Committee advises the Chair regarding interpretations of the Department Bylaws. New bylaws were adopted and approved in spring 2008 and have been approved by the CLA Dean. The process of revision took several years, in part because of changes in the university and college bylaws that were incorporated into the final document.

Personnel Committee

The Department Personnel Committee, according to Department Policies and Procedures, (a) provides qualitative and quantitative data on annual Faculty evaluations for consideration by the Chair, (b) reviews all requests for reconsideration for evaluation, (c) conducts annual reviews of progress toward tenure for probationary faculty. Each area elects one person to a two year term on the committee and the chair appoints two additional faculty to provide balance. The committee chair is appointed by the department chair. Untenured faculty do not serve on this committee.

Tenure and Promotion Committee

This committee is composed of all tenured faculty and/or all faculty higher than the person being reviewed in rank, depending on the nature of the decision at hand.

Undergraduate Curriculum Committee

This committee has been established to aid in decision making for the new silver core curriculum changes and to address other concerns of the undergraduate curriculum. The committee is chaired by the Associate Chair and comprises the undergraduate advisor(s) and other faculty members.

Ad Hoc Committees

A number of ad hoc committees deal with particular issues as they arise. Specific functions are often assigned within this committee structure.

Relationships with Other UNR Departments

The department maintains myriad relationships with other units on campus. We will review a small sample here to show the range of involvement.

COBRE- Center for Integrative Neuroscience- This center led by Dr. Michael Webster in the Psychology department supports research and interaction with several other departments across the University. Included in this support are the Depts. of Biology, Department of Electrical and Biomedical Engineering, Physiology and Cell Biology (School of Medicine), Cellular and Molecular

Pharmacology & Physiology(School of Medicine). There is also a substantial collaboration with and support for the imaging facility at Renown Hospital in Reno.

Interdisciplinary Neuroscience Undergraduate Major and Graduate Programs-

Approximately 48 faculty members from approximately 10 units across the campus contribute to the Neuroscience program which is co-directed by James Kenyon (School of Medicine), Grant Mastick (Biology), and Michael Webster (Psychology). Faculty home departments at UNR and UNSOM include: Psychology, Biology, Mathematics, Computer Science, Pharmacology, Physiology and Cell Biology, Microbiology and Immunology, Psychiatry, Agriculture, Nutrition, and Veterinary Science, and Electrical and Biomedical Engineering. There are additional members from the Institute for Neurosciences at Renown Hospital.

School of Medicine, Department of Psychiatry: Several faculty in the Department of Psychiatry have adjunct faculty status in Psychology due to their involvement with the Clinical and/or Behavior Analysis programs. Adjunct faculty in Psychiatry provide clinical consultation, serve on thesis and dissertation committees, participate in activities such as department sponsored conferences and colloquia, and collaborate with clinical faculty on research projects and grants. Alan Fruzzetti, a clinical faculty member in our department, conducts training in Dialectical Behavior Therapy for the Psychiatry faculty and residents twice a year. Faculty members provide clinical consultation regarding individual cases to the Psychiatry faculty. Drs. Ramona Houmanfar (in areas of curriculum design, and leadership training) and Linda Hayes (areas of immunology and biology) from the Behavior Analysis Program have established a multi-year collaboration with University of Nevada School of Medicine.

Department of Biology: The CBS program has traditionally had links with the Department of Biology, as well as other units such as Human Development and Family Studies, Speech Pathology, and the Sanford Center for Aging. Links with the Biology Department have included adjunct faculty from Biology within the Cognitive Brain Science Program. Strong link s are now provides by the creation of the interdisciplinary Neuroscience undergraduate major and the interdisciplinary graduate program in Neuroscience.

Department of Nursing: Fisher and V. Follette have consulted on research in this department.

Interdisciplinary Gerontology Curriculum Committee Fisher serves on this committee.

Department of Family Medicine: William Follette, a clinical faculty member in our department, provides training in research design to the Family Medicine faculty and residents.

Department of Internal Medicine: Jane Fisher, a clinical faculty member in our department, is collaborating with Internal Medicine faculty on several research projects focusing on dementia.

Department of Music: Dr. Gideon Caplovitz has an active ongoing collaboration with Dr. Jean Paul Perrotte in the Music Dept. entitled: Music Composition with EEG

Counseling and Testing Center: The Counseling and Testing Center serves as an externship and an advanced placement training site for clinical students. Center staff provides clinical supervision to clinical students who provide assessment and psychotherapy services to UNR students through the Center. In addition, a clinical student has managed the University Testing Service under the supervision of the Testing Center's director. Three of the faculty in the Counseling Center enjoy appointments as graduate faculty members in our department.

Intercultural Council The Intercultural Council is designed to enhance communication among diversity-related committees and to assist the university in the design and implementation of projects and programs aimed at improving intercultural relations at the university. Dr. Duckworth has chaired this council and her service on the committee included outreach efforts aimed at ensuring the awareness and securing the participation of members of the larger Reno community in Intercultural Council-sponsored activities. Duckworth has also served as a member of two IC sub-committees: 1) the University Community sub-committee, a sub-committee organized to identify, support, and execute initiatives, projects and programs aimed at serving the core values of a university community; and 2) the Disability Awareness subcommittee, a sub-committee aimed at ensuring the support and participation of IC and all Diversity committees in initiatives undertaken on behalf of UNR community members with disabilities

Lou Ruvo Brain Institute: Because of her expertise in cognitive difficulties, Dr. Fisher is asked to consult with this group.

Department of Social Work: Dr. Fisher consults with students and colleagues in SW.

Social Psychology: The Dept. of Psychology and Interdisciplinary PhD Program in Social Psychology (which, along with all interdisciplinary graduate programs, is administratively housed in the Graduate School) have a collaborative relationship in areas of mutual interest. In recent years these have included core research methods and statistics courses (PSY 706 & 724, SOC 707 & 764, STAT 757), and cross-listed or mutually accepted seminars (e.g., Social Psych and Gender, Social Influences). The programs have co-sponsored prominent guest speakers, and social psychology PhD students have been hired to teach the undergraduate social psychology course in order to free up Dr. Davis to teach graduate level seminars on social psychology topics (with the support of Dean Hardy and the Chair). Dr. Davis currently serves on dissertation committees in

social psychology, is advisor to one doctoral student, and is invited to social psych brown bags, search interview dinners, and program activities. Social psychology has provided her with a student on a doctoral fellowship who assists with her research activities.

Student Services: Jacqueline Pistorello (Counseling Services) and Steven Hayes are writing up the results of a large federally funded research grant that combined expertise from psychology and Counseling Services to attempt to address issues of student psychological health, with an emphasis on suicide prevention.

The Sanford Center on Aging: Jane Fisher supervises the activities of graduate students who receive funding from the center. She also provides consultation for the center activities.

Women's Studies Board: Victoria Follette, a clinical faculty member in our department, serves on the Women's Studies Board. In addition, Dr. V. Follette has taught a cross-listed course for the Women's Studies Program.

Satellite Program in Behavior Analysis

The Satellite Programs operate through educational service agreements between sponsoring agencies and the College of Extended Studies on behalf of the University. The programs are administered by the Program Director, Dr. Linda Hayes. The administrative structure of the program is shown below.

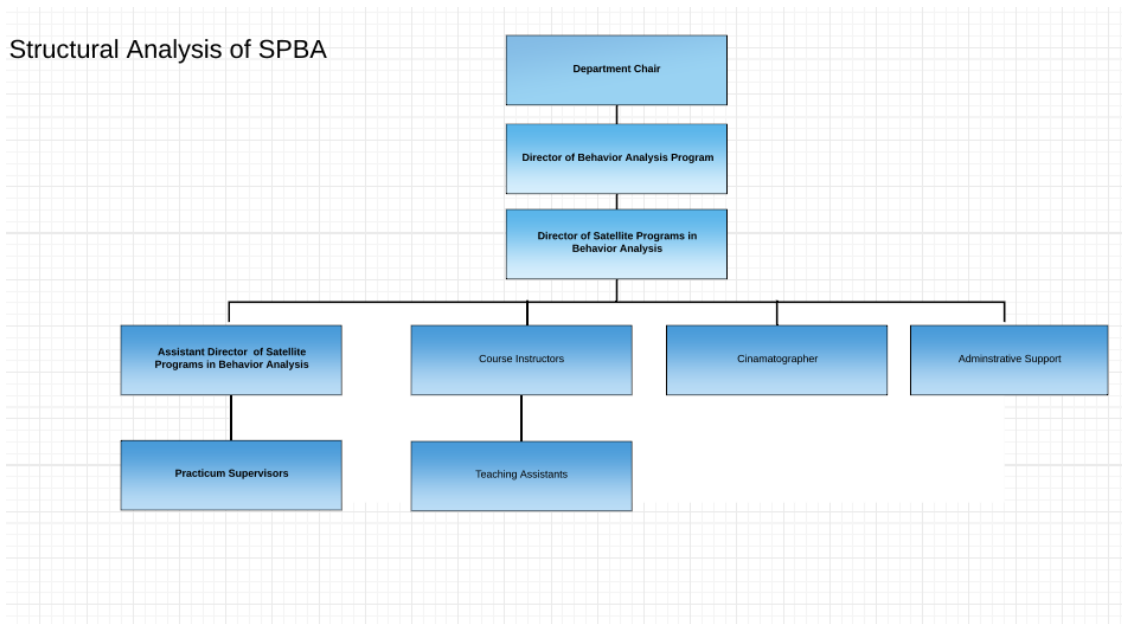


Figure I.2 Behavior Analysis Satellite Program organizational structure

All of the resources needed to deliver a satellite program to the staff of a particular sponsoring agency are charged to that agency. These resources include LOAs for

administrators, instructors and practicum supervisors, graduate assistantships, tuition and fees, equipment, and travel support.

1.3.b Objectives

Our primary objectives are to:

- prepare and launch our graduate students along productive career paths in the field
- prepare and assist our undergraduate majors for graduate work in psychology and related fields
- provide in-depth and balanced coverage of the discipline for all undergraduates regardless of whether they continue their education beyond the B.A. degree
- provide professional experience for all undergraduate majors through direct learning opportunities
- educate all students for lifelong learning

Our mission and objectives have remained stable over the years. We believe that the department has been highly successful in meeting the stated objectives. The full participation of our program in meeting these objectives through teaching, research, and service will be documented in the body of this report.

I.4. Prior Program Review

Prior Recommendations (excerpts from the 2008 external review report in italics);

- 1) *Behavior Analysis program FTE needs- We recommend that a specific plan be developed to stabilize the Behavior Analysis program. Even if there were not an immediate or short-term solution, having a plan in place would reduce uncertainty, especially for the junior faculty, and clarify the university's commitment to this unique type of program.... the site team recommendation is for the four .5 tenure track lines (two tenured and two pre-tenure) be converted to full time as quickly as resources permit...
...As full time faculty, these individuals could provide additional teaching resources for the undergraduate curriculum, and the soft money now being generated by those faculty for their salaries, could be deployed for graduate student funding. Thus, the university investment would serve two purposes and stabilize the department by making the Behavior Analysis program more commensurate with the other two.*

The Department has addressed this recommendation directly by filling new positions in the Behavior Analysis program with existing 0.5 faculty, thus raising all the Behavior Analysis faculty FTE to 1.0 satisfying this recommendation of the reviewers.

2) Undergraduate Curricula Modifications

Undergraduate Degree Options

The 1999 report noted that the creation of the two undergraduate tracks appeared to be serving a positive role. However at this point, it seems that a different arrangement is needed to make the two tracks more distinct and attractive to the students. Most importantly, the more rigorous course sequence needs to be formally recognized on the transcript, which could be done by establishing it as a BS degree...

...This recommended BS in psychology would remain distinct from the new BS in Neuroscience option (the joint degree with Biology). They would be serving different audiences, i.e. both being more science oriented in terms of methods but one offering a stronger biological option...

The department has addressed this concern in part. There are now three different options within the B.A. in Psychology: General Degree, Research Specialization, and Behavior Analysis Specialization. The specialization distinctions appear on the diploma and transcripts of students. These are described in more detail below. It has proven to be difficult to mount a B.S. in Psychology without requiring extended credit hours and while simultaneously avoiding redundancy with our existing Neuroscience major. Discussion regarding offering a B.S. continues however, in light of the immense popularity of the Neuroscience major.

Introductory Psychology Options

The prior report suggested that maintaining the two options for 101 and 103 might need to be reconsidered. This team also thought that these two options were not necessary, and apparently few faculty are interested in teaching 103. Thus, the better strategy might be simply to strengthen 101...

...The team concluded that it was important to maintain both formats for 101, as both seemed to be equivalent in learning achievements, and student choice of format at the introductory level seems important to retain. Making the entry level course appealing is important to retain the strongest students so the lecture format course should be taught by an instructor who is particularly skilled in large lecture delivery. The online format is acceptable and effective for the majority of the students so the Department (and University) may want to consider adopting that format for other large introductory courses as well.

The Department has addressed this concern directly and has opted to drop 103 and invest these resources in strengthening both formats of 101. We have been utilizing a lecturer in 101 that has received great accolades from the students and plan on continuing this format. In light of continued enrollment pressures, the department continues to assess the need for an online option for 101 and has offered such a course in summer session.

Capstone Requirement

Although the larger issue of the University requirement of two capstone courses is beyond the control of the department, we would encourage the department to think creatively about ways to provide an option within the major so that most if not all psychology majors could meet one of the current requirements within the psychology department. With only one regularly offered capstone section in the department, clearly very few psychology majors can enroll. This necessitates their taking two capstones outside their major emphasis, which raises the question of what is the capstone experience really providing? Especially during a time of obviously tight finances, this university requirement might need to be reevaluated at higher levels in light of the university's more recent commitment to being a more research-focused university. As currently implemented, the capstone requirement does not appear to serve as a true integrative capstone, at least in psychology; it is more of a senior seminar on special topics.

The University has been overhauling the curriculum requirements and has adopted a new system of “core objectives” one of these objectives describes a breadth course similar to the former “capstone” requirement. The psychology department is planning to offer several courses that will satisfy this core objective.

3) Department Staffing Needs

We recommend the department be provided at least one permanent lecturer position. This would strengthen the ability to offer the undergraduate curriculum, especially with the large numbers of majors, and relieve the department of having to rely so heavily on LOAs.

The university has recently provided funds for a lecturer/advisor. A search to fill this position is ongoing.

Given the growing size of the undergraduate majors there is also a need for at least one professional advisor...One full-time professional advisor along with one graduate student assistant seems an appropriate level of support for the current number of undergraduate majors.

The University has recently provided the funds to support an advisor position and has been providing support for a graduate student to assist with advising. The future of this latter position is uncertain.

The current Associate Chair position might be more effective if responsibilities were clearly defined. We recommend that this person serve as a Director of Undergraduate Studies. We recommend an undergraduate curriculum committee also be established. Such a committee might be convened by the Director when broader input is needed to address a concern that had arisen. Otherwise there might only need to be a scheduled review of the curriculum every 3-5 years.

The department has established an undergraduate curriculum committee and has been using the Associate Chair position for chairing this committee.

We also recommend a review of the grant infrastructure. Priority one is to provide more accounting-type support for grants that have been awarded, as investigators appear to be doing considerable paperwork that is not a good use of their time. The second priority is to establish a system to reinforce the considerable effort that is required to submit a grant. While receiving grants confers its own rewards, additional incentives to individual faculty would encourage others to make even more efforts to join active research groups. At the university level, an assessment of exactly what services are being provided would be useful. In many cases, it appears that time of university processing is the primary complaint. Many offices of sponsored programs have provisions to have extra staff during peak grant submission times or a priority system to insure that deadlines don't get missed.

The University has begun to modify the grant support and administration. The office of the Vice president of Research has been helpful in establishing support for external grant application review. There have been some administrative hires in order to provide some grant support during submission, however there remains little support at the University level for grant administration.

Finally, the front office has very little administrative support given the size of the department. An additional administrative assistant is needed as well as additional IT support.

The department has recently been given funds to hire an additional administrative assistant. This position has just been filled. IT support remains centralized to a large extent.

Currently the Chair position is a 9-month appointment, but clearly the demands are year round. We note that many other department chairs at UNR are 12-month appointments. Converting the chair's position to 12 months would appropriately compensate the chair for her efforts and make it a more appealing position in the future for other faculty with leadership abilities to consider.

The Chair's stipend now includes one additional month salary bringing the position to a 10-month equivalent. Requests to change the position to an official 'A' contract (12-month) continue to be made to the upper administration.

I.5 Analysis

Our department's administrative structure has remained relatively stable over the years and we continue to endorse the practice of self-governance. We work hard to balance the autonomy of our three program areas with the overall needs of the department. We have bylaws that are in close accordance with policy and procedure that has evolved over the

years and we continue to review a number of departmental policies such as budget management and the merit review process. We have plans to update our bylaws as soon as the University and College bylaws have been revised. The department bylaws must be consistent with those of the University and College.

We believe that the department has been highly successful in meeting the stated objectives. The full participation of our program in meeting these objectives through teaching, research, and service will be documented in the body of this report.

While we can take pride in our level of achievement across domains, there are also reasons for concern. In terms of research, scholarly activity, teaching, and service we continue to excel (later sections of the report elaborate on these activities). However, the administrative demands on our chair and directors continue to grow significantly. University and college service, as well as increases in the general bureaucracy that is required for all departmental matters, have taken a heavy toll on several of our faculty members. While the demands of administrative positions have increased, the stipends associated with those positions have remained stable since the last two program reviews (only the Chair stipend was increased from 10K to 12,500 in 2003 as a result of a university examination of stipends). Moreover, faculty are on 9 month rather than 12 month contracts, however the duties associated with these positions tend to span across the entire year. In response to this situation, the University added partial compensation (1 month overload salary) several years ago to the Psychology department Chair position bringing it to a 10 month position. Nonetheless, the faculty senate Department Chair Task Force clearly describes the university wide issues regarding department chairs. "It is critical to the future success of the University of Nevada, Reno that all chairs at the university are adequately supported and compensated, not just those in some colleges, and that all departments are empowered to recruit effective chairs. Further, the university's culture must demonstrably recognize and respect the importance of the position of chair in a large, public research institution." (May 2008).

As the university moves toward increased accountability, demands regarding assessment and reporting have also increased. Much of this has fallen to the chair who is able to call on a few faculty who routinely provide assistance with these projects. A specific concern is that our undergraduate curriculum is becoming more complex to both manage and evaluate. To deal with this issue we have added the role of Undergraduate Director to the position of Associate Chair. The associate Chair works in conjunction with an undergraduate advisor/lecturer to manage this problem. The University has also recognized the demands of increasing enrollment and has agreed to allow us to fill a new position of advisor and lecturer. This new hire will be part of the undergraduate curriculum team along with the existing advisor/lecturer and the Associate Chair.

With the rapidly expanding and popular undergraduate Neuroscience major and newly established graduate PhD programs in Neuroscience there is now a substantial burden placed on the director of those programs. We hope to secure a course release in the future for this position, currently held by Dr. Webster.

Satellite Program in Behavior Analysis

The primary objective of the Satellite Programs is to produce competent practitioners of behavior analysis. As the demand for this product is enormous, the program could grow exponentially with additional administrative resources. Present administrative support amounts to overload support for the Satellite Program Director, one graduate assistantship for the Assistant Director, and .15 FTE of clerical assistance.

PART II: UNDERGRADUATE COURSES AND DEGREE PROGRAMS

II.1 Undergraduate program organization, objectives, and effectiveness

Undergraduate objectives

The department has two sets of goals for its undergraduate curriculum:

1. The education of students with a liberal arts foundation, who:
 - a. understand basic principles in psychology
 - b. understand methods of inquiry in psychology
 - c. appreciate the relevance of psychology to human affairs
 - d. can think critically and analytically about psychological matters
2. The training of students, who:
 - a. are prepared to pursue graduate study in psychology and related disciplines
 - b. have adequate oral, writing, analytical and computational skills to achieve that goal
 - c. have a thorough appreciation of methods of scientific inquiry in psychology
 - d. can read primary literature in psychology with understanding and appreciation
 - e. have a broad appreciation of various psychological fields and their applications
 - f. are able to integrate different domains of knowledge within the discipline

Curriculum Organization

Undergraduate students in the Department of Psychology are encouraged and able to participate in the scholarly and applied work of psychology at many different levels -- from taking a wide variety of psychology courses (most of which are taught by Ph.D.-holding faculty members) to actively participating in research laboratories to working in one of our many applied projects. We feel we provide a tremendous breadth of training to our students, preparing them well for graduate school and careers in psychology.

The undergraduate program offered by the Department of Psychology terminates in a Bachelor of Art degree in Psychology or a minor in Psychology. The Psychology curriculum provides students a base for a liberal arts education, or as a foundation for work in other fields such as medicine, law, business, human services, management, sales and the like. Advanced coursework in statistics, experimental psychology, and direct learning helps to establish a strong foundation for a career in psychology upon graduation. Many of our undergraduates gain research and practical experience and earn post-graduate degrees in psychology and related fields.

In fall 2012, the two emphases within the major: liberal arts and graduate preparation were updated to the general degree and research specialization respectively. This change was made to

provide students with a breadth of experience across the content areas (i.e., cognitive and brain science, clinical, behavior analysis, social / life span) of psychology. The update also impacted the introductory requirements which now requires that all psychology majors, regardless of specialization, to take both General Psychology (PSY 101) and Introduction to Research Methods (PSY 240). The PSY 240 course in particular allows for students to experience research in psychology before deciding which track to continue on for their major. Consistent with the strong interest of our majors in pursuing careers where a liberal arts foundation in psychology is desired (e.g., medicine, law, human resources), 75% of students chose the general degree track, based on enrollment for fall 2015 (**Figure II.1**). In contrast, the subset of psychology majors choose the research specialization to prepare for graduate school in psychology. Students in this specialization take a wider variety of courses that are typically either required or greatly desired by graduate school admission committees.

In fall 2015, a behavior analysis specialization was added with 10 students declared under that emphasis at the beginning of the semester. The mission of the undergraduate psychology degree specialization in behavior analysis is to produce skilled behavior analysts who meet the needs of the community and contribute to science and practice of behavior analysis. This mission is achieved by providing comprehensive training in behavior analysis, out of which more advanced basic, applied and theoretical interests may be developed. The degree specialization, in the context of the psychology major, prepares students for graduate study or for paraprofessional careers in human services.

Behavior analysis is a highly specialized field of study that is not duplicated elsewhere at the University. The behavior analysis specialization allows students to become eligible for certification as Board Certified Assistant Behavior Analysts, an internationally recognized paraprofessional credential, and to be eligible for licensure in Nevada as Certified Autism Behavior Interventionists. The curriculum also meets the standards for undergraduate program accreditation by the Association for Behavior Analysis International.

Neuroscience Degree

The Departments of Psychology and Biology have recently teamed to offer a new BS degree in Neuroscience for the UNR campus. In Fall 2008 this major was offered for the first time. The major is designed to provide students with a strong background in both systems and physiological approaches to understanding the brain, and to prepare students for professions and advanced studies in a wide range of fields including behavioral and biological science and health sciences. The major is based on a combination of existing courses offered through the two departments with the addition of three new courses that were developed specifically for this major. The major is co-directed by Dr. Michael Webster in Psychology and Dr. Grant Mastick in Biology. Student advising is also offered jointly through both departments.

The Neuroscience degree is the first interdisciplinary undergraduate degree at UNR to span two colleges, and was developed over a period of two years involving extensive discussions between department faculty and administration. It is built in part on the research and teaching strengths of faculty in the Cognitive and Brain Sciences Program, which has recently focused new hires in the area of Cognitive Neuroscience. Student surveys and the success of comparable degree programs at other schools suggest that the major will prove very popular with students, and it is

expected to attract significant numbers of current Psychology and Biology majors along with students from outside these areas. It has been designed to prepare students for advanced studies in the brain sciences and also to readily meet the course requirements for medical school. The degree also positions the department to be centrally involved in the newly approved interdisciplinary PhD program in Neuroscience for the campus.

Since its implementation, the neuroscience major has seen rapid growth (**Figure II.1**), from 11 majors at the inception of the program to 368 neuroscience majors at the beginning of the semester in fall 2015, comprising 28% of the undergraduate student population within the Department of Psychology.

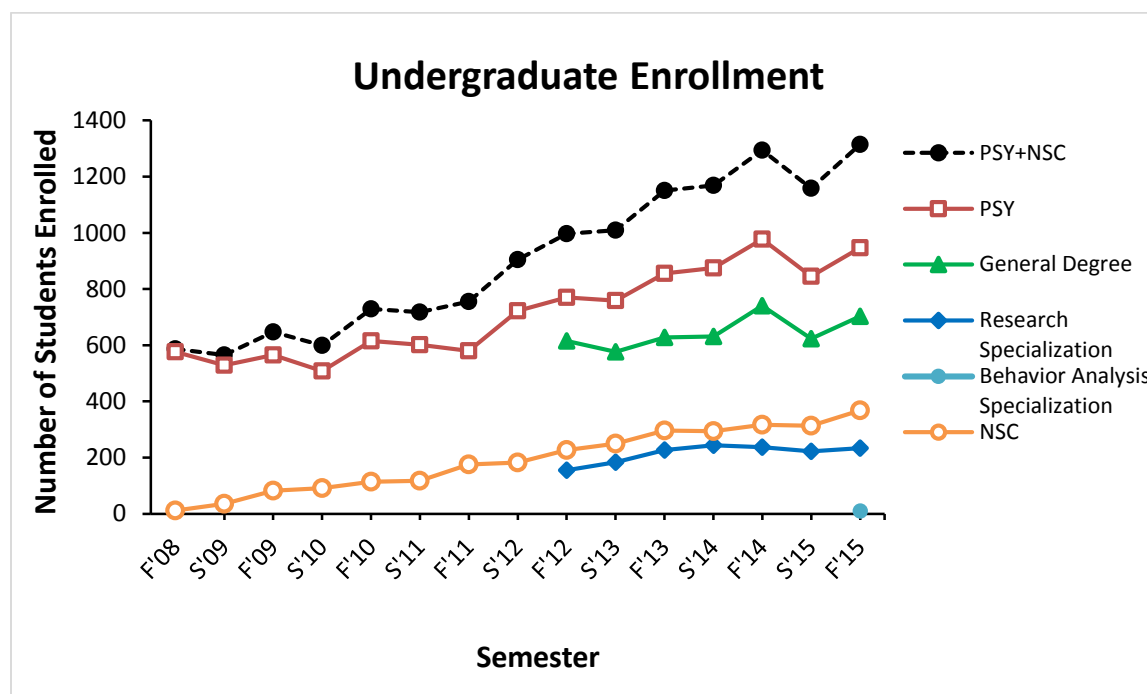


Figure II.1 Number of students enrolled within the Psychology Department by major.

The teaching load for service courses in the Department of Psychology is extremely high, particularly in the General Psychology (PSY 101) course. For example, in Spring 2015, 828 students were enrolled in PSY 101 and only 2% of these students were Psychology majors (**Figure II.2**). However, the number of psychology majors enrolled in this introductory course tends to be slightly higher during fall semesters than in the spring – in fall 2015 11% of the students enrolled in PSY 101 were psychology majors. Though there is a small increase in psychology majors enrolled in this course during spring semesters, it is still quite evident that the vast majority of students in PSY 101 are from majors outside of the Department.

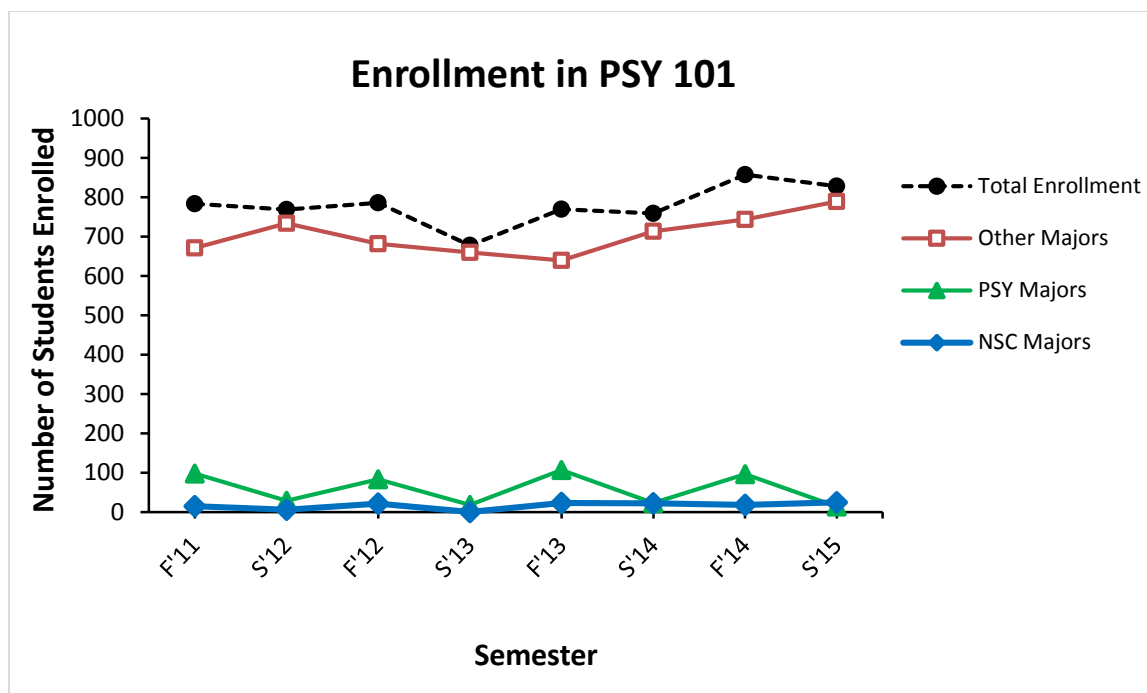


Figure II.2 Number of students enrolled in PSY 101 by major.

Psychology B.A.

In response to the recent directive from the NSHE Chancellor, the Bachelor of Art degree in Psychology now requires 120 credits, 42 of which must be upper division credits (courses numbered 300-499).

The emphases within the Bachelor of Art in Psychology degree share the same core curriculum requirements, College of Liberal Arts requirements, and minor requirements:

University Core Curriculum Requirements (36-43 credits)

- English
- Math
- Fine Arts
- Core Humanities
- Diversity
- General Capstone courses

College of Liberal Arts Requirements (6-20 credits)

- Foreign Language – four semesters
- Breadth – two courses within the College of Liberal Arts outside of major and minor

Minor Requirements (18-24 credits)

- Any minor offered within the university

The differences between the emphases within the degree are as follows:

	General Degree	Research Specialization	Behavior Analysis Specialization
Educational Goal:	Liberal arts education	Basis for graduate training in Psychology or related fields	Basis for training and certification in behavior analysis
GPA Requirements:	College minimum	May enter at any time but must have and maintain a 3.0 GPA in Psychology and 2.75 overall	May enter at any time but must have and maintain a 3.0 GPA in Psychology and 2.75 overall
Curriculum Differences			
Introductory	101, 240	101, 240, 210, 301	101, 240
Content Area	15 credits	15 credits	9 credits
Direct Learning	N/A	6 credits	6 credits
BA Requirements	N/A	N/A	19 credits
Psychology Electives	9 credits	6 credits	N/A
Total Major Credits	30 credits	40 credits	40 credits

Introductory (6 credits)

PSY 101	General Psychology
PSY 210	Statistical Methods
PSY 240	Introduction to Research Methods
PSY 301	Experimental Psychology

Content Area (one course from each area)

Cognitive & Brain Science

PSY 403	Physiological Psychology
PSY 405	Perception
PSY 416	Cognitive Psychology
PSY 432	Human Memory

Clinical

PSY 441	Abnormal Psychology
PSY 451	Basic Principles of Psychotherapy
PSY 435	Personality

Behavior Analysis

PSY 205	Elementary Analysis of Behavior
PSY 407	Applied Behavior Analysis
PSY 450	Industrial and Organizational Psychology
PSY 472	Experimental Analysis of Behavior
PSY 473	Radical Behaviorism

Social/Life Span/Personality

PSY 233	Child Psychology
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PSY 261	Introduction to Social Psychology
PSY 442	Psychology of Aging
<i>Foundations & Capstones</i>	
PSY 408	History of Psychology
PSY 410	Philosophical Criticisms of Psychological Research
PSY 419	Conditioning and Learning
PSY 4xx	Capstone

Direct Learning

PSY 275	Undergraduate Research
PSY 375	Advanced Undergraduate Research
PSY 439R	Field Experience in Teaching Psychology
PSY 440	Field Experience in Behavior Analysis
PSY 447	Geropsychology: Field Experience
PSY 448	Geropsychology: Independent Study
PSY 475	Honors Thesis

Behavior Analysis Requirements

PSY 205	Elementary Analysis of Behavior
PSY 407	Applied Behavior Analysis
PSY 395	Ethics in Behavior Analysis
PSY 443	Research Methods in Applied Behavior Analysis
PSY 472	Experimental Analysis of Behavior
PSY 473	Radical Behaviorism
PSY 412	Principles of Psychological Assessment

A major advantage of the Psychology Behavior Analysis degree over other majors with a more prescribed curricula is that it allows students the opportunity to choose among a wide range of psychology courses in order to explore and refine their specific interests within the field. The Department has offered more than 30 different upper division Psychology courses since fall 2008. Overall, there are approximately 30 psychology courses offered in the fall semester and 25 in the spring semester. These numbers do not reflect multiple sections, labs, and discussion sections of courses. Overall enrollment in psychology courses remains high, which can be seen across the regular semesters and summer sessions, depicted in figures **II.3** and **II.4** respectively. Enrollment in psychology courses across semesters has shown a gradual increase while enrollment across summers has remained stable. Student engagement in faculty supervised hands-on experience (i.e., Direct Learning) has remained high, with 19% of psychology majors enrolling in these types of courses in spring 2015. The number of students enrolled in Direct Learning has been somewhat stable over the years (**Figure II.5**).

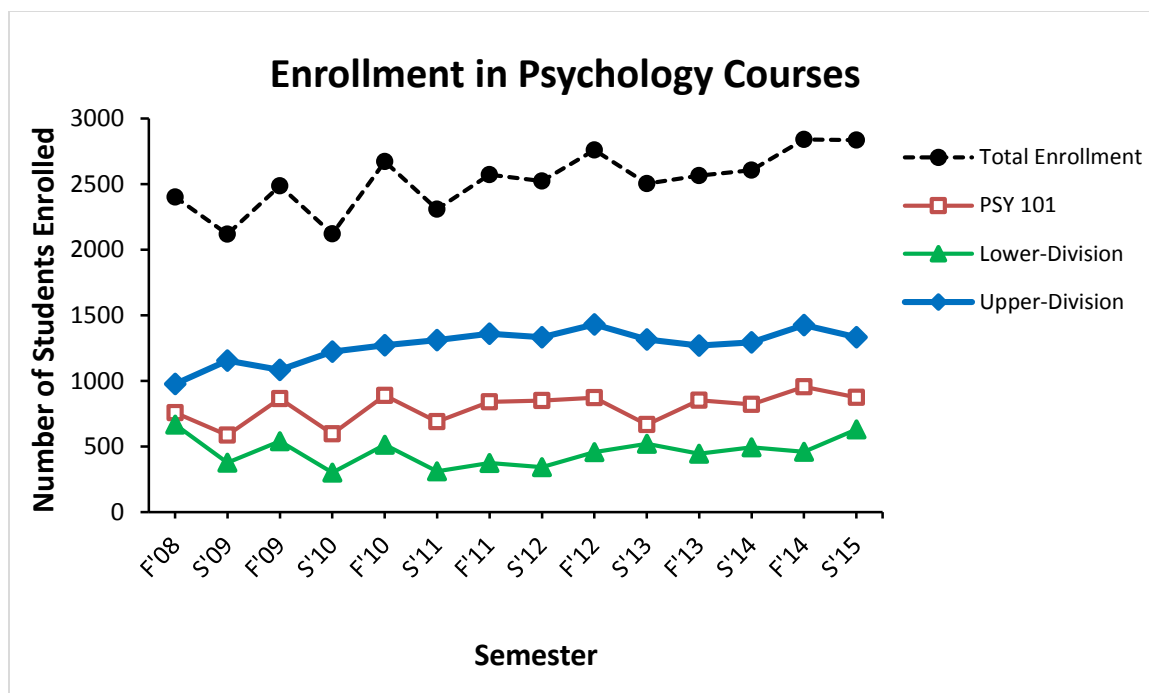


Figure II.3 Enrollment in Psychology undergraduate courses across semesters.

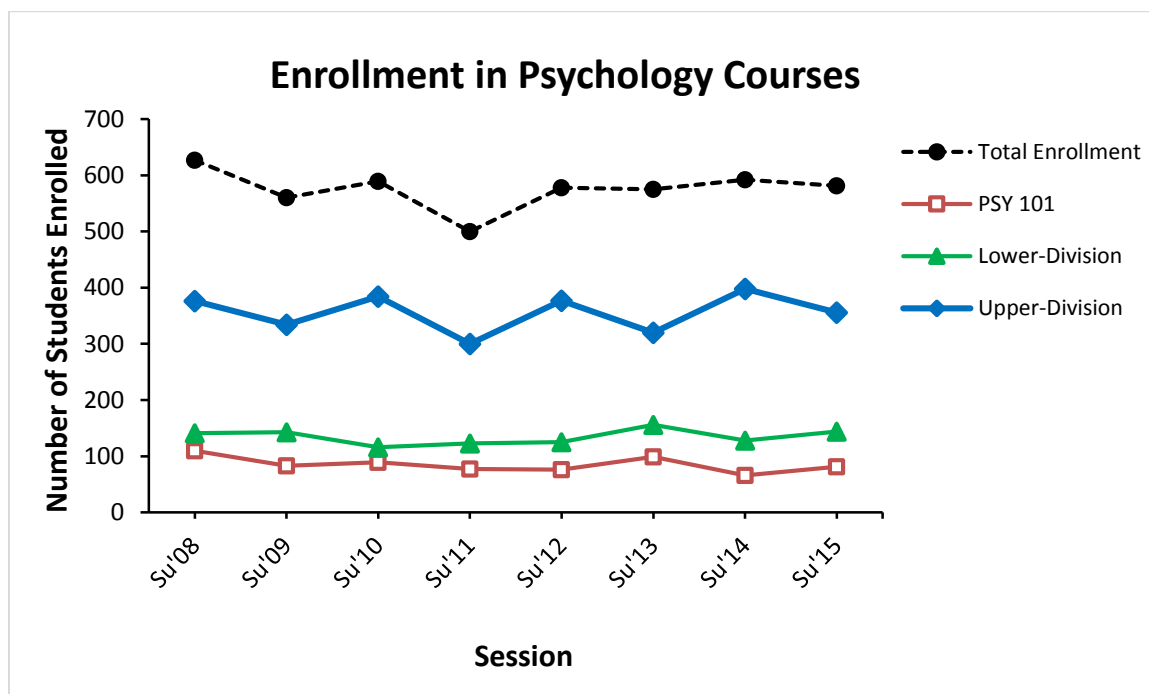


Figure II.4 Enrollment in Psychology undergraduate courses across summers.

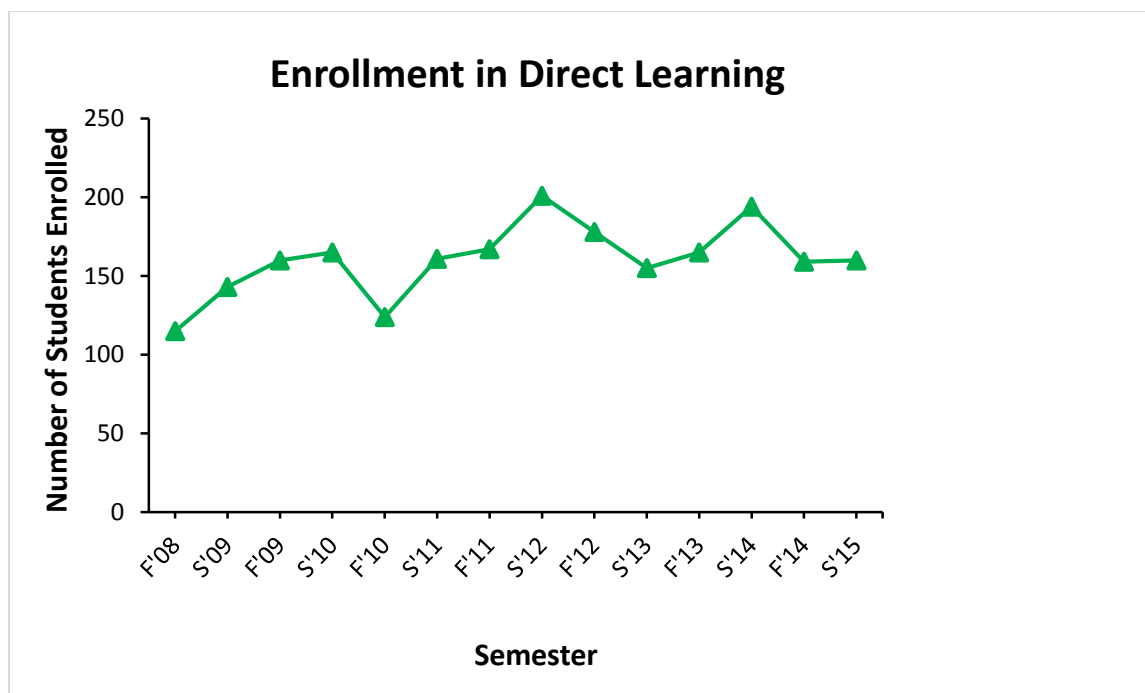


Figure II.5 Enrollment in direct learning courses across semesters.

Psychology minor

A minor in Psychology requires 18 credits and the same Psychology introductory and content area courses necessary for the Psychology major general degree. However, it does not require a Foundations & Capstones Content Area course.

Neuroscience B.S.

The Bachelor of Science degree in Neuroscience requires 120 credits, 42 of which must be upper division. Neuroscience majors must complete the same core curriculum and science foundation courses as Biology majors. They must also complete Biology and Psychology foundation courses, five elective courses, and three or more units of direct learning or independent study.

The Biology foundation courses required for the Neuroscience degree are very similar to those taken by Biology majors that select the molecular emphasis. In addition to BIOL 190, 191, 192, 300, 315R, and 395, neuroscience majors must take:

- Introduction to Neuroscience (PSY/BIOL 105)
- Neurobiology (BIOL 475)

The following Psychology foundation courses

- General Psychology (PSY 101)
- Experimental Psychology (PSY 301)
- Physiological Psychology (PSY 403)

The Neuroscience BS also requires at least 2 elective courses from each cluster:

Human Anat. & Physiol. I (BIOL 223)	Psychophysiology (PSY 404)
Comparative Animal Physiol. (BIOL 316)	Perception (PSY 405)
Molecular Biology (BIOL 405)	Animal Intelligence (PSY 413)
Molecular Biology Lab (BIOL 406)	Cognitive Psychology (PSY 416)
Evolution (BIOL 415)	Conditioning & Learning (PSY 419)
Developmental Biology (BIOL 466)	Computer Applications (PSY 427)
Genes, Brains, and Behavior (BIOL 477)	Human Memory (PSY 432)
Animal Behavior (BIOL 481)	Human Neuropsychology (PSY 446R)
	Philosophy of Cog. Sci. (PHIL 434)
	Philosophy of Mind (PHIL 435)

Summary of student learning outcomes

One of the missions of the Department of Psychology at the University of Nevada, Reno is to provide university undergraduates with a broad general education and to ensure that students in the department master the field of Psychology. This curriculum emphasizes an understanding of psychology and its methods, and a breadth of experience across various subject domains. Students are also equipped with basic and applied knowledge in general psychology, and current knowledge in within their field of expertise. Practical experience and exposure to ethical issues are also important within the research and behavior analysis specializations. Graduates with a Bachelor's Degree in Psychology are prepared to succeed in the workplace, professional school, or in graduate school. A list of the objectives for the Psychology Behavior Analysis degree, as well as all psychology course with their descriptions and student learning outcomes are provided **Appendix II.I** at the end of this part of the program review self-study.

Neuroscience majors are expected to master basic biological and psychological principles before progressing to core concepts and principles in neuroscience. Students will develop research and applied skills and will be competitive for graduate study.

Service courses

The degrees offered by the Department of Psychology require a few of service courses, primarily introductory, capstone, and psychology content area courses.

The Department of Psychology offers service classes that:

- meet the Core Social Science requirement: PSY 101
- are recommended preparation by other majors
 - Introduction to Psychology (PSY 101): Pre-Nursing, Criminal Justice, Human Development and Family Studies
- substitute for the Sociology major requirements
 - Introduction to Social Psychology (PSY 261)
 - Statistical Methods (PSY 210)
 - Introduction to Research Methods (PSY 240)
 - Computer Application in Social and Behavioral Science (PSY 427)

The Department of Psychology also cross lists our courses with other departments.

- Introduction to Neuroscience (BIOL/PSY 105)
- Principles of Animal Behavior (BIOL 481 / PSY 414)
- Psychology of Gender (PSY/WMST 467)
- Techniques in Neuroscience Laboratory (BIOL/PSY 479)

New courses

Since the previous program review, 6 new courses have been introduced or formalized in the curriculum.

- Introduction to Neuroscience (PSY 105)
- Ethics in Behavior Analysis (PSY 395)
- Human Psychophysiology Lab (PSY 404)
- Mindfulness in Psychology (PSY 436)
- Research Methods in Behavior Analysis (PSY 443)
- Techniques in Neuroscience Laboratory (BIOL/PSY 479)

Innovative teaching or course delivery methods

Instructors within the Department of Psychology use a wide variety of technologies to deliver course content and foster student engagement in the classroom. A majority of courses utilize the Blackboard Learn course management system to make course materials and grade accessible for students. This system is also used to communicate with students through announcements and discussion forums. Instructors make use of technology to assist with delivering course and measuring learning, which include the use of audio/video clips, and instant feedback tools (“clickers”), to name a few. To foster student engagement, instructors assign collaborative in-class assignments, administer “reading check” quizzes, and use active student responding and inter-teaching approaches. For some courses, students are expected to engage with technology available through the university to assist with in web searches and literature reviews. It is common for instructors to offer additional discussion and review sessions.

PSY 101: Self-Paced, Interactive, Networked System of Instruction (SPIN)

In order to accommodate the large number of students who would like to take General Psychology (PSY 101), the department developed a self-paced program of instruction to deliver this course. The Self-Paced, Interactive, Networked system of Instruction (SPIN) is a modified version of the Personalized System of Instruction (an instructional design technology that was pioneered by Fred Keller in early 1960s). The PSY 101 SPIN has been designed to maximize students’ active responding and enhance their personalized learning of the course material. The maintenance of this system has required the instruction, management of approximately 1200 students per year since the fall of 2000. Prior to 2000, the course was taught in a related but different format. When Dr. Houmanfar took responsibility for the course, she made significant revisions to the course.

Currently, Dr. Houmanfar is the instructor of record for the program which requires a great deal of teaching and supervision. For instance, she supervised and evaluated seven graduate students

and 30 undergraduate proctors (PSY 439) during the spring and fall of 2014. In addition, she has regular one-to-one interactions with an average of 40 PSY 101 students per week throughout the aforementioned semesters. Because of the tradition in the Behavior Analysis Program of ongoing assessment of program outcomes, a great deal of data has been gathered in regard to this class. Some of these data are presented here, in part because this course has generated a number of questions over the years.

Figures II.6 & II.7 demonstrate that a majority (i.e., 64% in fall 2014 & 56% in spring 2014) of PSY 101 students received a grade of B or higher in the SPIN system during the spring of 2014 and fall of 2014.

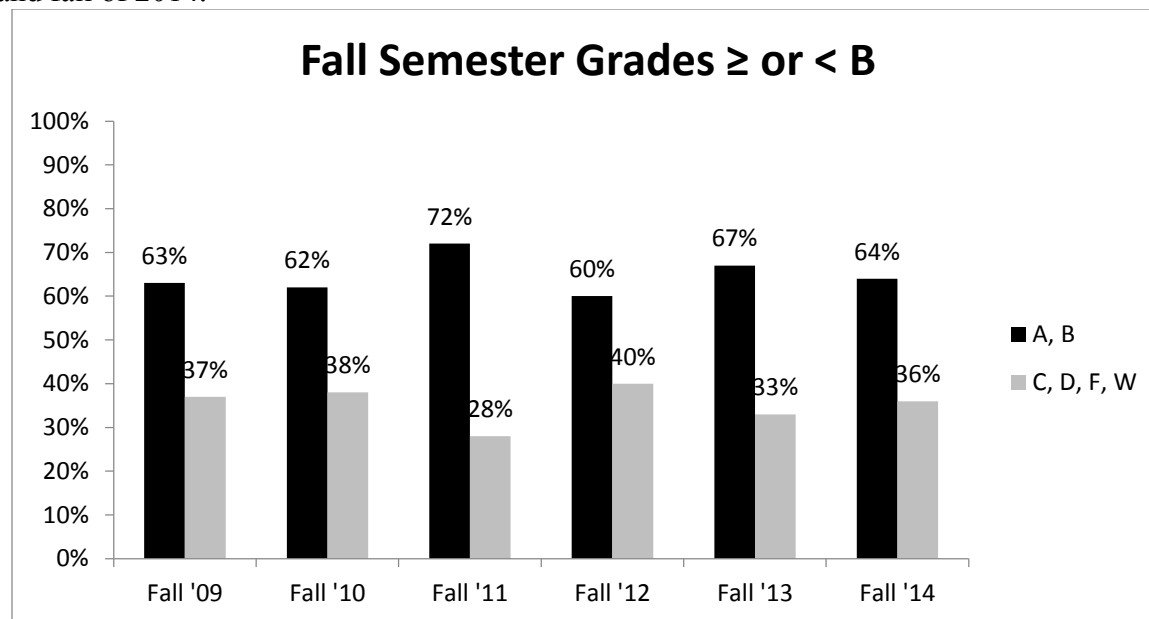


Figure II.6 PSY 101 SPIN fall semester student course grades.

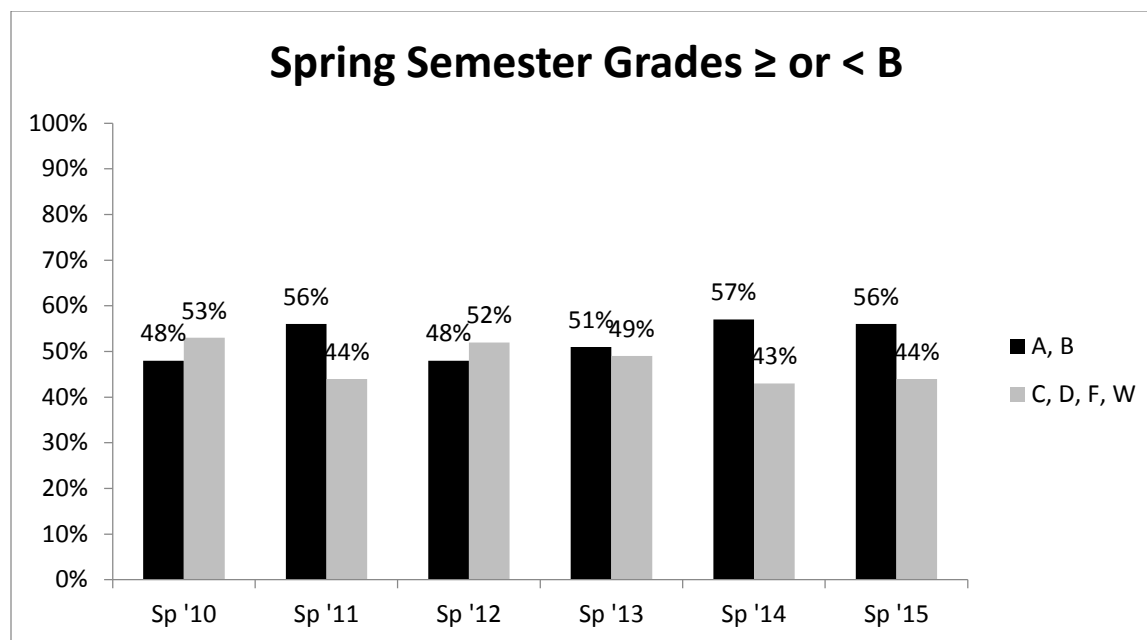


Figure II.7 PSY 101 SPIN spring semester student course grades.

Figures **II.8** & **II.9** demonstrate that a majority (i.e., 87% in Fall 2014 & 81% in Spring 2014) of PSY 101 students received a grade of C or higher in the SPIN system during the spring of 2014 and fall of 2014.

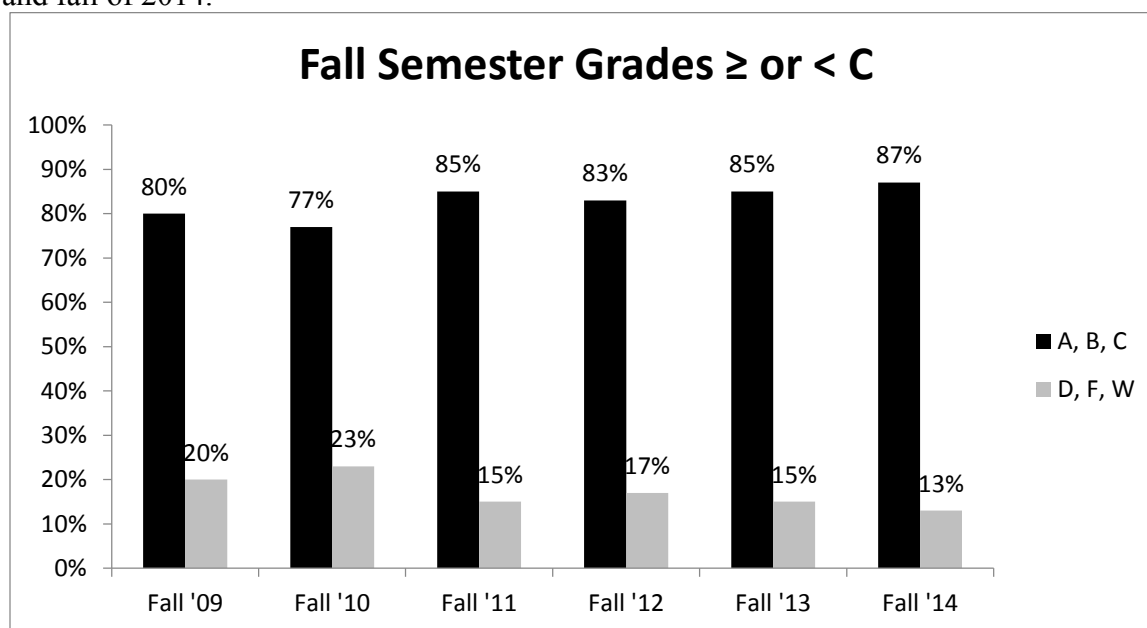


Figure II.8 PSY 101 SPIN fall semester student course grades.

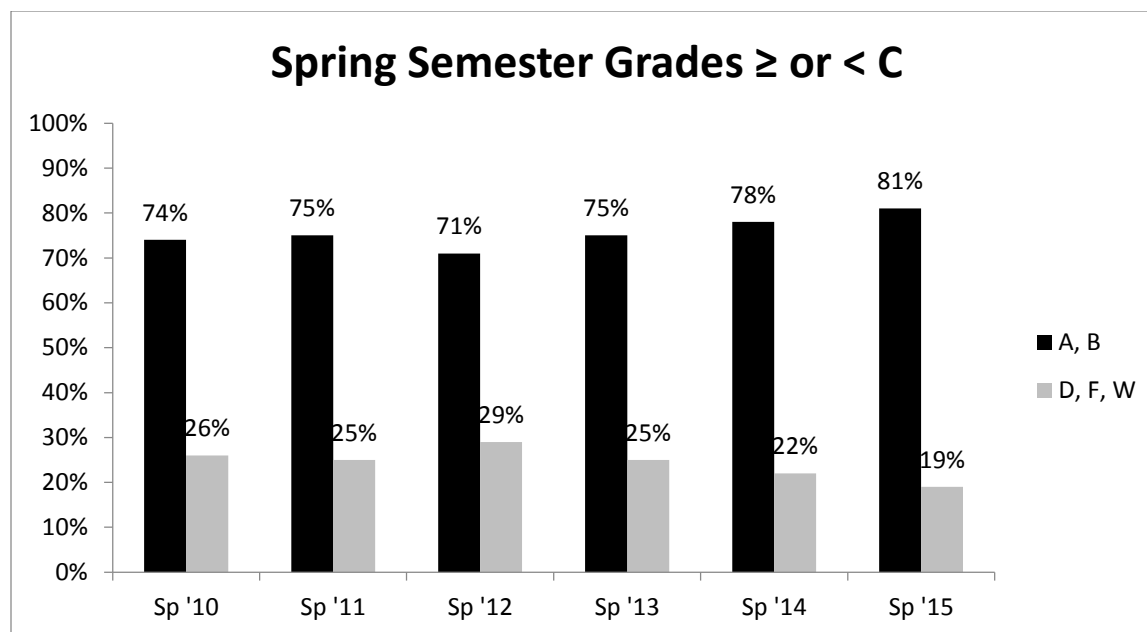


Figure II.9 PSY 101 SPIN spring semester student course grades.

Figure **II.10** shows the data associated with learning gain in the SPIN system since the fall of 2008. The pre- and post- test in the SPIN is inclusive of the presentation of 40 questions to all students in the course prior to the beginning of course assignment and again in the final exam. This pre-test is called the Psychology Knowledge Test. Please note that these 40 questions were not presented to the students in any of the course assignments except for the Psychology Knowledge Test taken at the beginning of the semester and again in the final exam. Figure **II.9** demonstrates an average of 30% learning gain in this course since the fall of 2007.

Further, the overall consumer satisfaction data for the 2015 spring semester suggest that: 85% of students would recommend this course to a friend and 72% of students would “choose to learn this way” if given the option again.

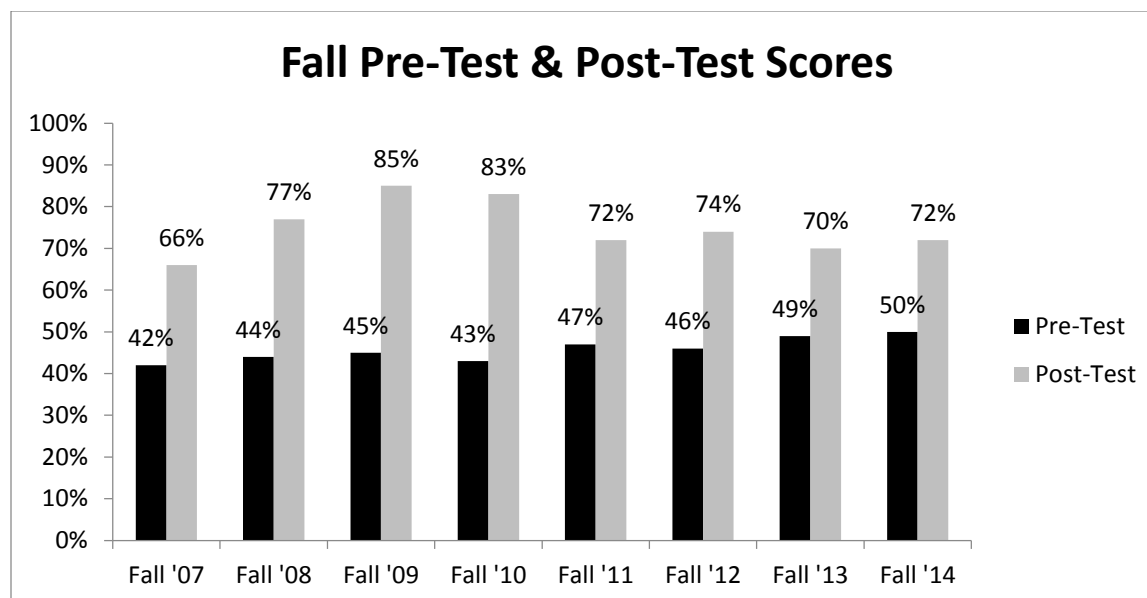


Figure. II.10 PSY 101 SPIN fall semester student pre vs post-test score comparisons on the Psychology Knowledge Test.

In order to enhance the effectiveness of SPIN as an instructional system, Dr. Houmanfar's graduate student assistants conduct a series of systematic component analyses in the form of theses and dissertation projects in this system. Two theses have been produced since the last review: "Examining the Effects of Active Responding on Student Performance in an Introductory Psychology Course" by Daniel Reimer and "The Effects of Instructor Questioning Behavior on Voluntary Student Engagement and Academic Performance in an Introductory Psychology Course" by Carolyn Brayko.

One of the experimental studies in SPIN entitled "Differential Effects of Elaborate Feedback and Basic Feedback on Student Performance in a Modified PSI Course" was published in 2009 in the Journal of Behavioral Education. Dr. Houmanfar and the instructional design team (including graduate and undergraduate Teaching Assistants).

Dr. Houmanfar is continuously applying her expertise in Instructional Design and Behavioral Systems Analysis to improve the courses' structure. In addition to being able to provide a weekly "small class" environment for approximately 1400 students per year, Dr. Houmanfar also incorporates online learning components for the students to review, including: video examples of content, and an online questions forum for students.

The assessment office conducted a comprehensive review of both the lecture and SPIN versions of 101 in 2003/04. While both formats were essentially comparable in outcomes, there were different strengths and weaknesses to both forms of the course. Feedback from this evaluation was used to improve both versions of the course and have been successfully implemented since that time.

Increasing Accessibility of the Program

Given the tremendous growth of the undergraduate program and the diversity of our student population, the Department of Psychology has recognized the need to increase the accessibility of all classes offered. This has resulted in offering a number of courses during the summer and winter sessions, as well as weekend and evening courses during the regular semesters. With the move to MyNevada from ePaws in 2011, this new method of registering for courses has made it easier to successfully determine and adjust course offerings. The wait list function has been especially useful for students.

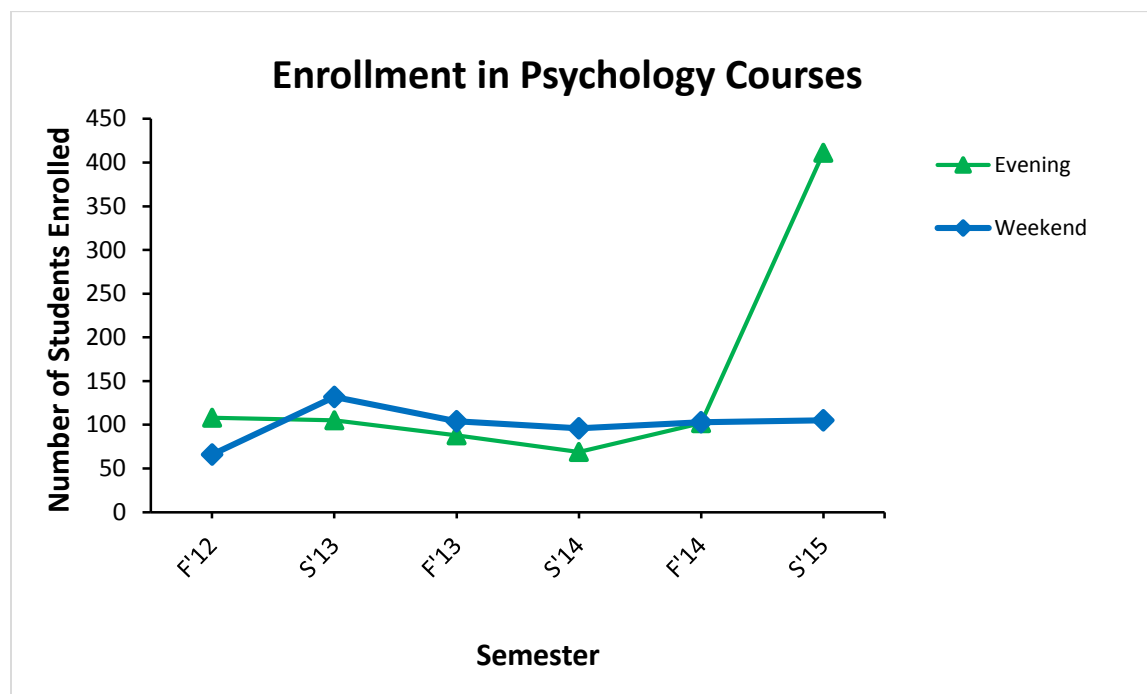


Figure II.11 Enrollment in evening and weekend courses across semesters.

The Department has offered a number of evening (starting 5:30 pm or later) and weekend courses to accommodate students. The enrollment in these courses has remained stable from fall 2012 to spring 2015 with the exception of a dramatic increase in evening course enrollment in spring 2015 (**Figure II.11**). This increase was largely due to a high enrollment section of PSY 101 offered as an evening course.

Impending changes

- Recently, the University Core Curriculum (general education curriculum) was debated and a new plan, the “Silver Core Curriculum” is currently on route to being implemented. A detailed description of new core requirements is provided in **Appendix III**. The Silver Core Curriculum will be in effect for all majors and undergraduate students beginning fall 2016.

In spring 2014, the Psychology Department submitted eligible existing psychology courses for Silver Core status. The submission process for each course involved evaluating course student learning outcomes, creating a template course syllabus, and providing a general description of

how course outcomes are likely to be assessed. Once submitted, each course underwent a lengthy, multi-level review process which often resulted in requested revisions and resubmissions. As a result of this process, the following psychology courses have been approved for Silver Core (CO) status, one of the implications of this being that outside majors may choose to take these courses in order to fulfill their core requirements:

- General Psychology (PSY 101) - **CO6**
 - Introduction to Research Methods (PSY 240) - **CO12**
 - Experimental Psychology (PSY 301) – **CO9, CO14**
 - Advanced Undergraduate Research (PSY 375) - **CO14**
 - Ethics in Behavior Analysis (PSY 395) - **CO12**
 - History of Psychology (PSY 408) - **CO13**
 - Philosophical Criticisms of Psychological Research (PSY 410) - **CO13**
 - Multicultural Psychology (PSY 431) - **CO10**
 - Psychology of Trauma (PSY 452) - **CO13**
 - Psychology of Gender (PSY 467) - **CO10, CO13**
 - Research Thesis (PSY 475) - **CO14**
 - Techniques in Neuroscience Laboratory (BIOL 479 / PSY 479) - **CO14**
- There is an intent to archive Principles of Animal Behavior (PSY 414), since faculty who taught this course are no longer with the Department.
 - Mindfulness in Psychology (PSY 436) will be offered for the first time in fall 2016.
 - The university has given the Psychology Department an additional 12-month, full-time lecturer/advisor position. Although the initial appointment is for one year, the position has the potential for an open-ended appointment. The lecturer will (a) liaise with the lead departmental advisor to advise incoming, transfer, and continuing psychology undergraduates on all major, minor, and general academic requirements, (b) track student retention and progress toward degree completion, (c) work with faculty to assess student outcomes and foster student success, and (d) develop and teach lower-division psychology courses (e.g., introductory psychology).

II.2 Undergraduate students

Despite a deep economic recession and declining enrollments at other NSHE institutions, the overall enrollment growth at the University has been substantial, and the increase of Psychology and Neuroscience majors has been dramatic. The number of Psychology majors has increased by more than 40% to approximately 819 students during the 2014-15 academic year (**Figure II.12**). This increase accelerates greatly when the Neuroscience majors are added, resulting in more than a 60% increase over this period. In comparison, enrollment growth at the University has seen a 28% increase over the past 7 years.

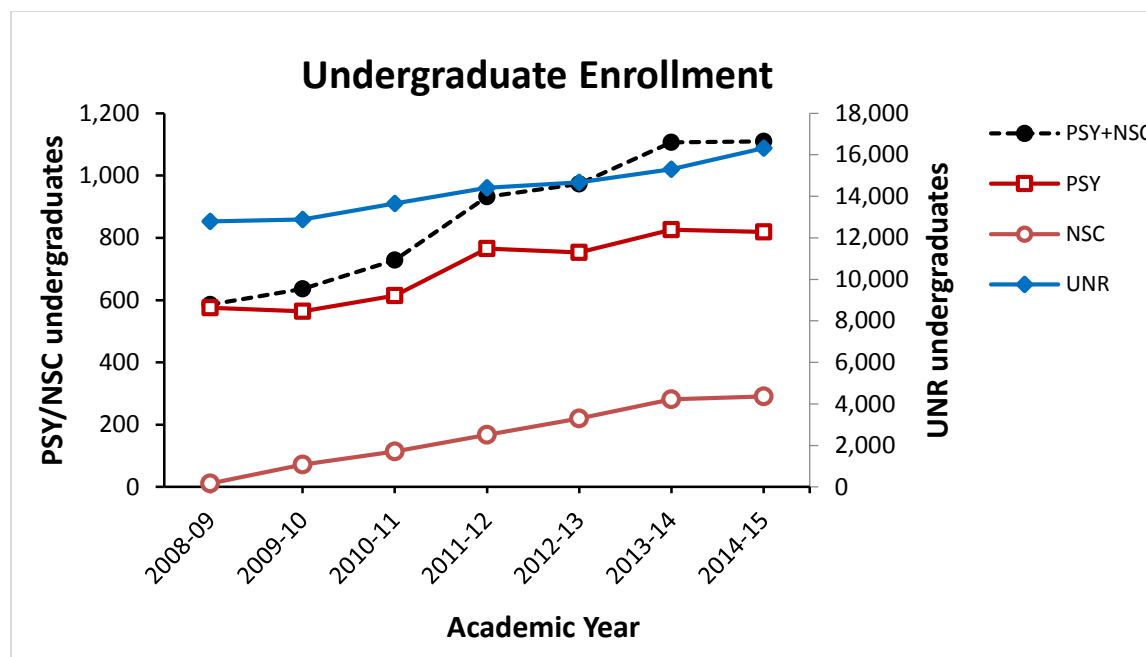


Figure II.12 Growth in the number of Psychology and Neuroscience majors compared to the total number of undergraduates enrolled at the University of Nevada, Reno at the beginning of each fall semester for 2008-2015.

As a result, of this demand, psychology course sizes have increased, and some temporary lecturers under Letter of Appointment contracts have been hired. The number of graduate teaching assistant positions assigned to Psychology increased from 17.5 in 2008 to 22.5 in Spring 2015. However, this approximately 22% increase has not kept up with the 60% growth in psychology and Neuroscience students during this time.

Quality

UNR Chapter of Psi Chi

Our department has an active Psi Chi group, thanks primarily to the active support and involvement of our faculty with the organization. Psi Chi has experienced many successes during the last 7 years. They have developed a fruitful relationship with the Nevada State Psychological Association. This collaboration has resulted in many interactions (e.g., volunteer work and participation of Psi Chi officers and members in NSPA conferences) and meetings between Psi Chi members and professional psychologists in the community. In addition, the exemplary performance of the Psi Chi chapter at UNR has resulted in its designation as a Model Chapter by Psi Chi National. In addition, the Psi Chi UNR Chapter has received an honorary recognition from the Psi Chi National for reaching its significant anniversary as one of the successful chapters in nation.

With regard to our departmental activities, they have co-hosted luncheons and an Undergraduate Research Fair with the Department of Psychology. The Undergraduate Research Fair is hosted by the Department Chair and Psi Chi to provide an annual venue for undergraduate UNR Psychology researchers to present and discuss their work. These events have been well received,

attracting over 100 audience members (undergraduate and graduate students across majors). In addition, we have conducted well attended bi-monthly meetings and recruited over 190 new members since fall 2008. The group inducted 26 new members (a record number) in the fall of 2010. Our active Psi Chi organization is another example of providing a top caliber experience to our undergraduate students.

Study Abroad

Our undergraduate majors report positive experiences in their study abroad courses through the University Studies Abroad Consortium (USAC). While we do not formally track participation in USAC, 14 of our majors and 4 minors were involved in the program last year. In addition 4 Neuroscience majors also participated. This program originated on the UNR campus and offers student opportunities to study for a brief summer semester or a traditional semester (or year) at a number of institutions around the world. Popular locations include Spain, the UK, Central and South American, and China. Our USAC program works closely with the department to provide course offerings in a manner that makes for an almost seamless integration of the coursework into the student's plan of study.

Honors Program

Currently we have approximately 26 Psychology majors and 43 Neuroscience majors who are in the Honors program. We have made an ongoing commitment to working with the honors program through our coursework and thesis advising. For the last several years, we have offered an honors section of Psychology 101. Several of our faculty have supervised undergraduate honors theses as an overload to their general responsibilities. The majority of those projects involve empirical work. Completing a project that involves the IRB process, data collection and analysis, as well as a formal paper can be a difficult endeavor in a one year time line and we are discussing this issue with the honors program. However, a number of these projects have been quite successful and have led to presentations at national conferences.

Diversity

UNR and the Psychology department are committed to increasing diversity of the University campus, including faculty, staff and students. Part of this effort includes tracking the demographics of each. Figure II.13 shows a breakdown by gender and ethnicity of the Psychology major students over this reporting period. In addition to the general growth in population there are also trends in the ratios of the different groups. For example, the relative numbers of Hispanics in the major is increasing slightly faster than the general growth and the other minority groups. It is notable that consistent with national data, there are many more female majors than male majors.

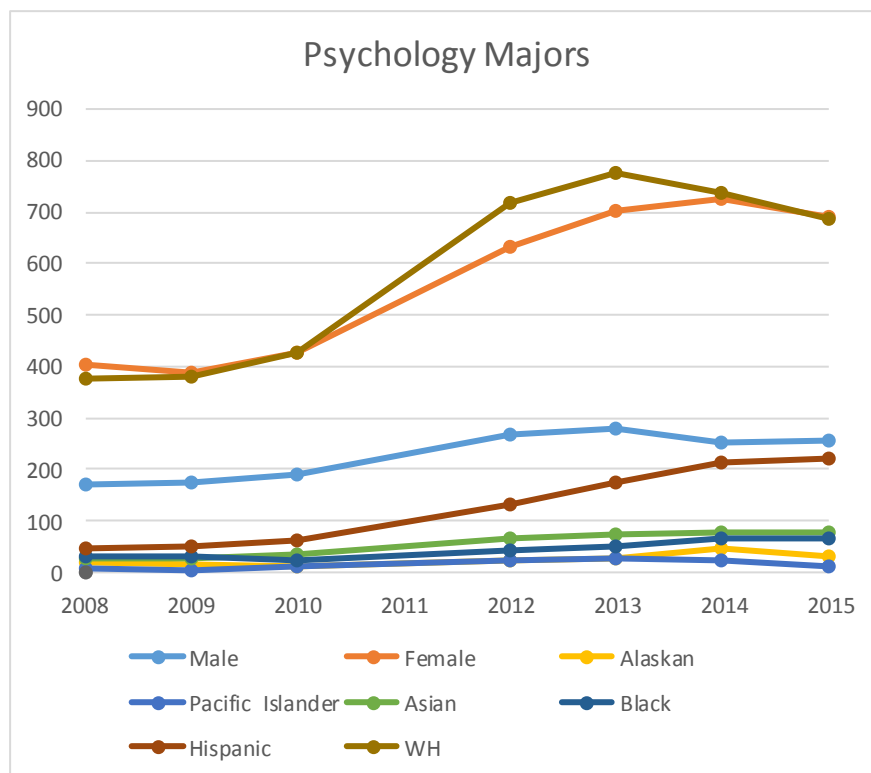


Figure II.13 Psychology major enrollment by gender and ethnicity (data from 2011 was unavailable).

The relative percentage of the different groups in Psychology is comparable to that of the College of Liberal Arts. This comparison for data from the Fall of 2014 can be seen in Figure II.14. One major difference is the proportion of males to females is still higher in Psychology than within the college as a whole. Percentages across ethnic groups in Psychology tends to be quite similar to that of the college as a whole.

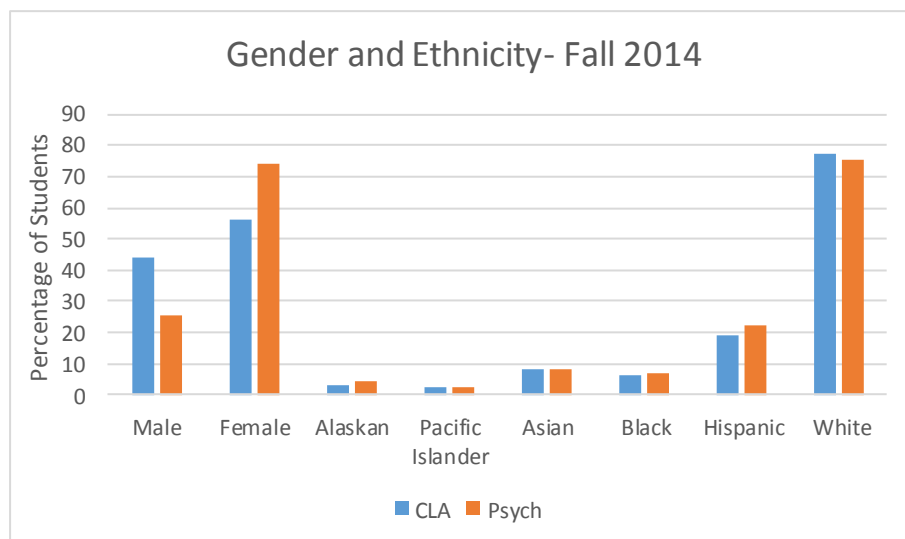


Figure II.14 Gender and ethnicity data from the Department of Psychology and the College of Liberal Arts (without Psychology) at the start of Fall 2014

Retention and Graduation

The University of Nevada, Reno is a land grant, access institution with a mandate to make higher-level education accessible to as many Nevada residents as possible, and accepts 82% of those who apply. This leads to a wide range of abilities and preparation amongst incoming students and student retention is a campus-wide concern. Despite the rapid rise in the number of majors, retention of our majors has remained fairly constant during this time period. Since 2008, an average of 86% of psychology and neuroscience majors have been retained from their 2nd to 3rd years. This rate matches the retention rate across all majors at the University (**Figure II.15**).

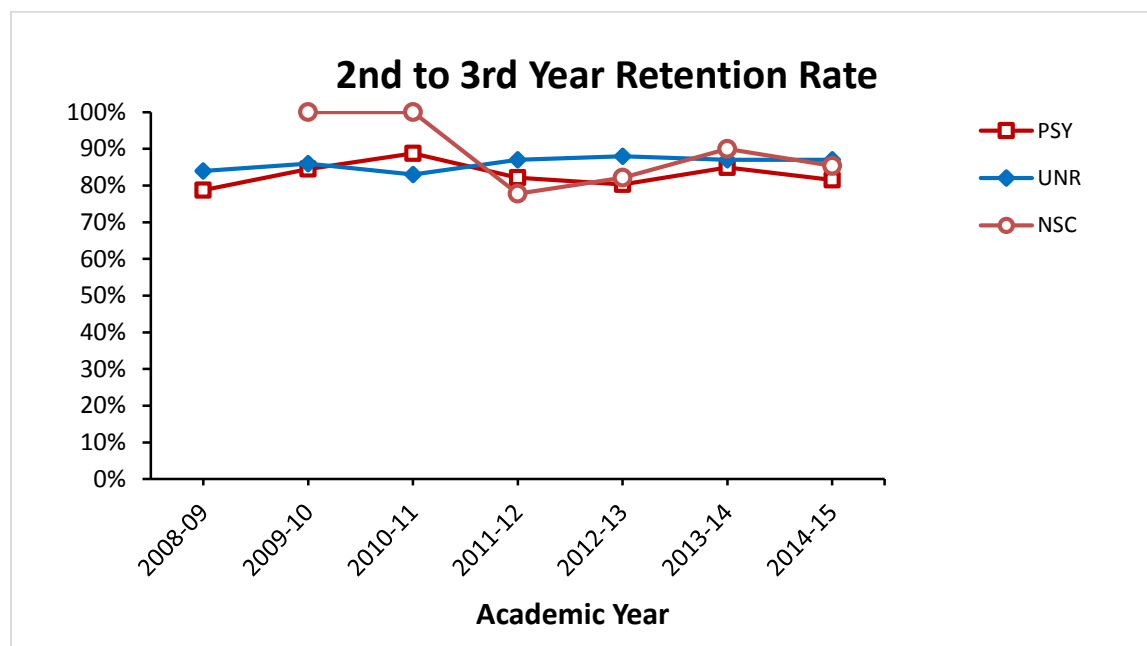


Figure. II.15 Percentage of Psychology and Neuroscience undergraduate retained from 2nd to 3rd year in comparison to the University undergraduate retention rate.

Predicted to improve retention rates, an academic boot camp program called PsychFIT (FIT is an acronym for Freshmen Intensive Transition) was introduced in August 2014 to introduce incoming freshmen to the skills needed to success in college. This program is part of the NevadaFIT program which was initiated by the Office of the Provost, and includes various FIT boot camps in a number of programs.

The College of Liberal Arts closely monitors its freshmen class with aggressively active advising practices. Two semesters of mandatory advising in addition to closely monitoring class schedules, grades, degree applicable credits and opportunity (if need be) for grade replacement. The university has a core completion policy for English and math – students must be continuously enrolled until these are completed – a registration hold is placed on their account until enrolled/complete with the core coursework.

Other steps put into place include mandatory advisement for certain student populations. Mandatory advising for all transfer students with 60 credits (upon entry to the university) was implemented by the college for the spring of 2015. Starting that semester, all new transfer students will have mandatory advising upon entrance to the university. All students on probation have mandatory advising. The college highly encourages students at 90 credits to get a pre-graduation evaluation done by advisors. In addition to this, letters and emails are sent out to encourage participation.

To assist with monitoring and maintaining student progress, the University also established a new academic probation program. Undergraduate students are placed on academic probation when their cumulative University GPA falls below a 2.0. Students who remain on probation for

three consecutive regular semesters and fail to raise their cumulative University GPA above the academic probation threshold (2.0) are then dismissed from the University.

A total of 1,214 Psychology and Neuroscience degrees have been awarded in the last seven years (**Figure II.16**). The drop in the number of graduating majors during 2011 may be attributed to economic conditions that discouraged students from leaving college to find jobs and start paying off student loans. As the Neuroscience major was not created until 2008, it is impressive that 201 students have already graduated with this interdisciplinary degree.

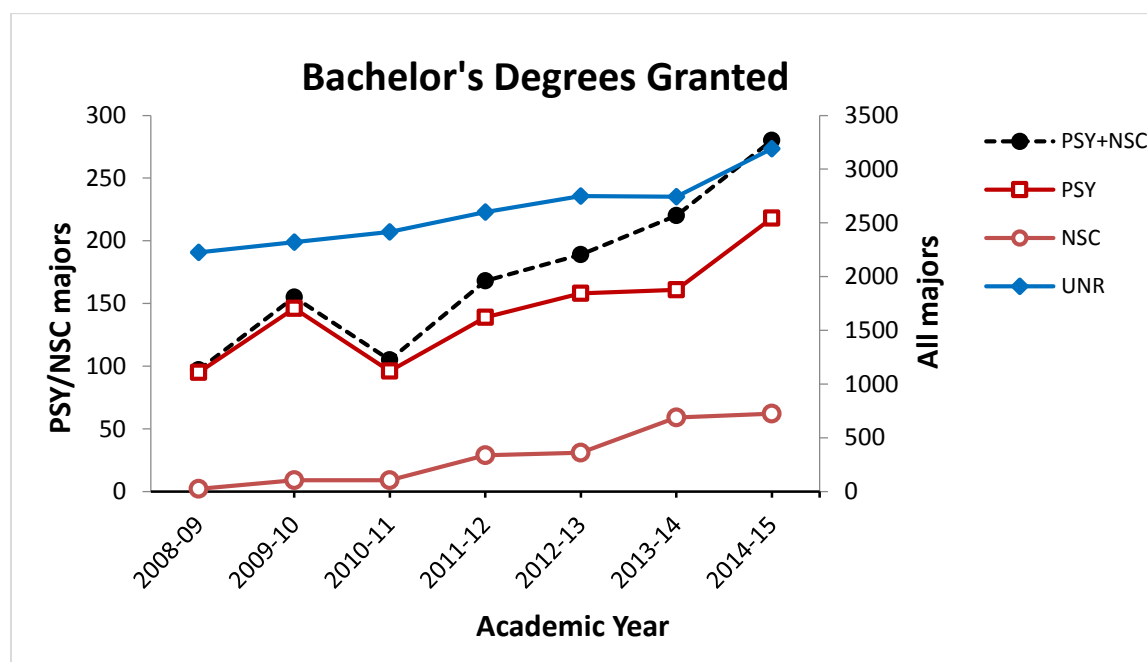


Figure II.16 Number of Psychology and Neuroscience bachelor's degrees awarded in comparison to the number awarded across all majors.

While the University time to degree completion has been on average 5.2 years for undergraduates, the Psychology and Neuroscience time to degree during the past two years has been faster (**Figure II.17**). We hope this trend continues to near towards the desired time to degree rate of 4 years.

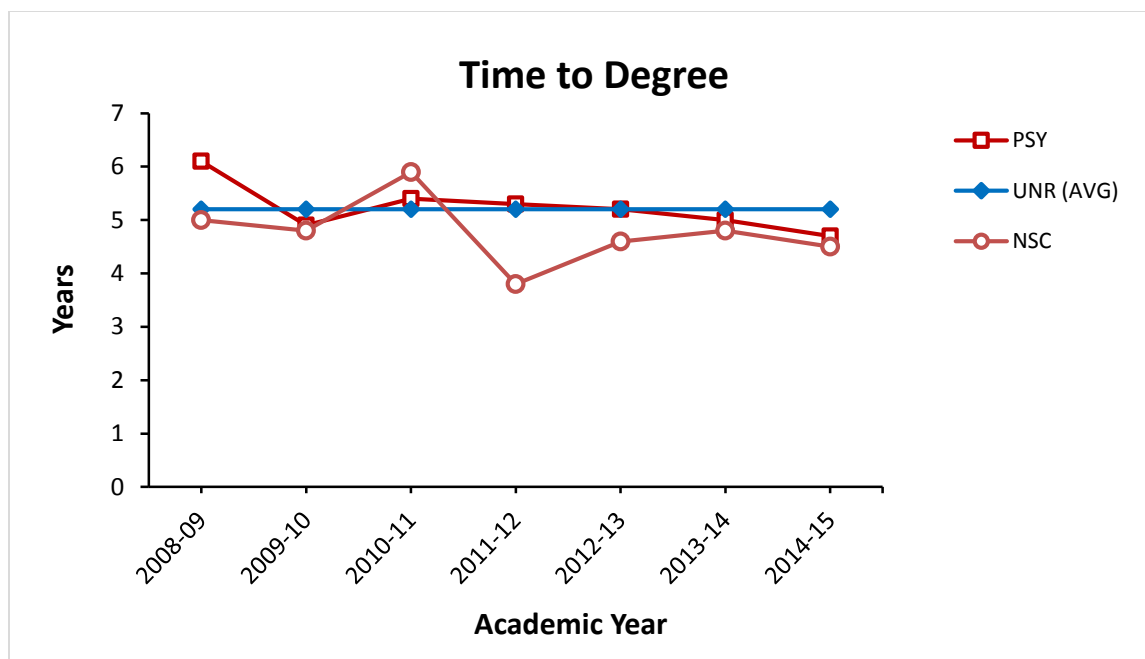


Figure II.17 Time to degree averages for Psychology and Neuroscience majors in comparison to all majors.

Over the past 7 years, Psychology and Neuroscience graduating GPAs have remained higher than the University average. However, in the past 4 years, the University average graduating GPA has slightly increased to near closer to those of Psychology and Neuroscience (**Figure II.18**).

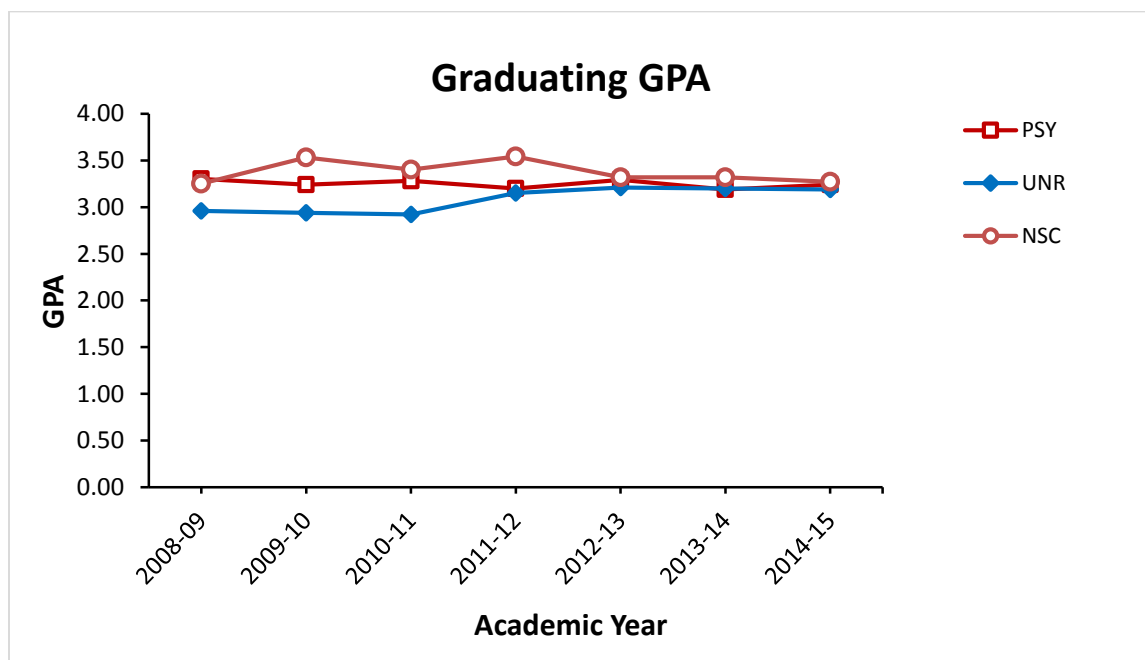


Figure II.18 Graduating grade point averages (GPAs) for Psychology and Neuroscience majors in comparison to all majors.

Recruitment

The University has a strong interest in attracting high quality students, particularly national merit scholars, and encourages in-state students to remain in Nevada and strives to attract students from out of state. The University of Nevada, Reno also actively recruits under-represented groups. The University hosts approximately 15 campus visits each year to attract potential students, and provides low cost airfares through the Nevada Bound program. Many of these recruitment events are conducted through fall previews, High School presentations, Middle School outreach programs, College fairs, and counselor visits.

In addition, the University uses several different vendors capable of providing prospective students who meet pre-established criteria (e.g. underrepresented students). These vendors include Cappex, Chegg, SAT, ACT, and National Research Center for College and University Admissions (NRCCUA). The University purchases these services and advertises them in their recruitment communications to encourage these prospective students to learn more and visit the university.

Representatives from the Psychology Department attend a number of recruiting events on campus and coordinate with the College of Liberal Arts recruitment personnel for off campus events. A large number of students are always interested in Psychology and Neuroscience, and we have had no difficulty in attracting a sufficient number of students. Psychology is one of the largest majors within the College of Liberal Arts, and these majors make up almost a quarter of all majors within the College (**Figure II.19**), with this percentage holding constant over the past few years. Rather than recruitment, the challenge has been in managing the large numbers we attract in an effective manner.

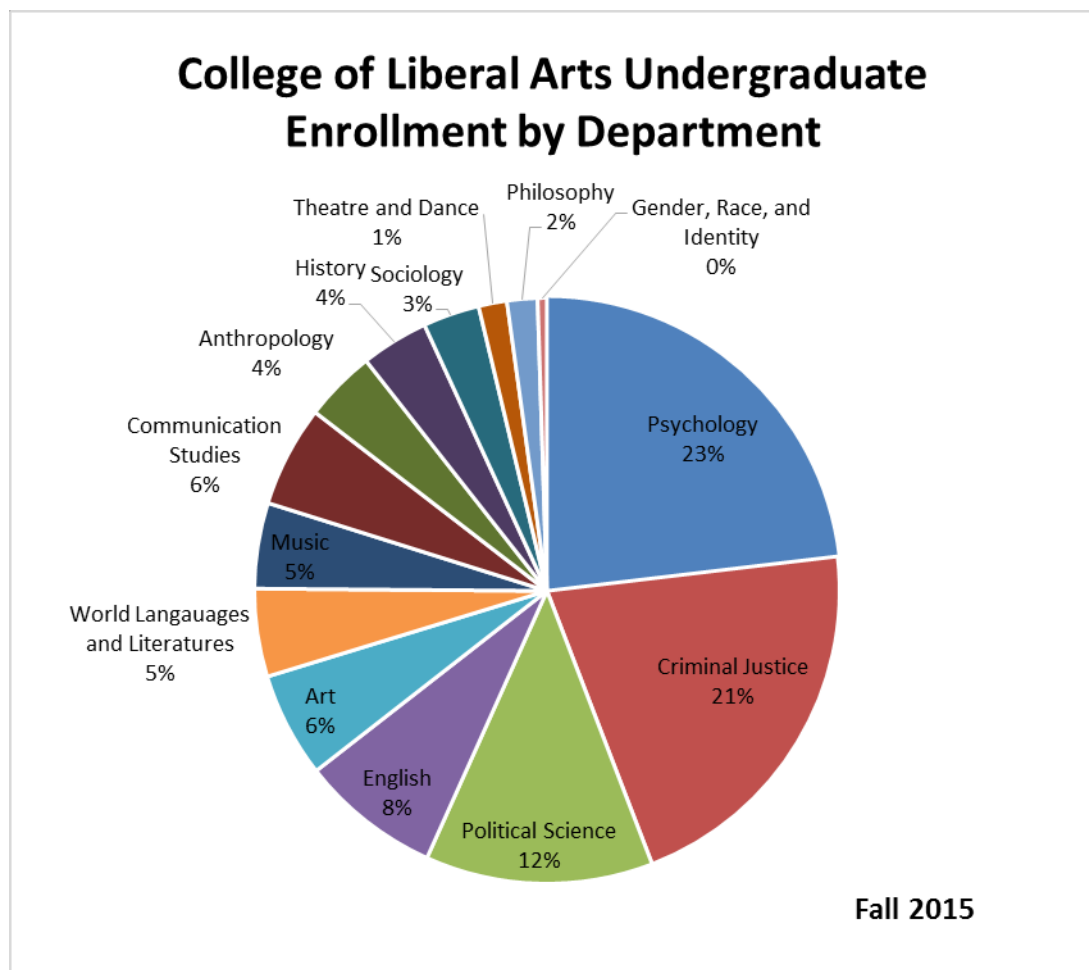


Figure II.19 Percentage of psychology majors within the College of Liberal Arts at the beginning of fall 2015.

Academic Advising

Our Psychology Department academic advising structure has been unique in that a Graduate Assistantship position was created to provide most of the initial advising with prospective and current students in psychology. Faculty advisors play a significant role in supervising large numbers of undergraduate researchers, including those who conduct individual seniors or honors research projects. In addition, faculty provide advising with regard to graduate school and careers, as well as general guidance in developing a course of study. Finally, our department receives important advising support from the College of Liberal Arts advising office.

The University granted the Psychology Department a full-time, 12 month lecturer/advisor position to serve as the primary advisor for the department as well assist with delivering psychology courses. This position was filled summer 2015, and has made a great difference in meeting the needs of our advisees. In addition to this position, the Graduate Assistantship position remained primarily to serve Neuroscience majors, Psychology minors, transfer, and probation students. Given that as of fall 2015 there are a total of 1,315 Psychology and

Neuroscience majors, more advising support is needed.

Department advisors have participated in professional development by attending Academic Advising professional meetings at the University of Nevada, Reno, the College of Liberal Arts, and the National NACADA Convention. Frequent training workshops are provided by the University on new academic advising tools, assessing data on transfer students, and graduation processing.

The approach to undergraduate advising in the Department of Psychology follows a developmental, as opposed to prescriptive, approach. Advisors inform advisees that the advising experience is a learning opportunity, just like any other course on campus. An academic advising syllabus is used with students which outlines a description of academic advising, student learning outcomes, and student and advisor responsibilities. Advisors have found that laying out clear expectations in this format helps to enable students to engage in efficient and constructive advising meetings.

Students in the department are made aware of the advisor as a resource for many of their needs, and students are able to be deliberate in using advising for help essential to their goals. Our advisors have been instrumental in helping students with a breadth of needs by directing students to other useful resources on campus.

At summer Orientation, all College of Liberal Arts students go through a comprehensive program to review coursework and requirements to graduate in four years. Students are advance registered for their first semester into appropriate classes based on standardized test scored and major chosen.

All incoming undergraduate Psychology and Neuroscience freshmen are required to complete mandatory advising for their first two semesters. In addition to mandatory first semester advising, freshmen students are now required to visit with their academic advisor before registering for their second semester. The psychology advising office has taken advantage of such a requirement by offering group advising sessions that allow for an in depth overview of both requirements and an overview of what psychology here at UNR can offer. During these group sessions, each student is at a computer so that they can bring up their own, unique academic requirement report and follow along with the advisor when covering various aspects of their degree requirements.

Many student questions are answered through our email advising service. For simple questions, we have found it very useful for students to use our email service. We also maintain a mailing list and send out general announcements to our majors and minors about important deadlines and opportunities that become available.

Currently, one Graduate Assistant and one Psychology faculty lecturer/advisor share the responsibility of advising hundreds of continuing and transfer Psychology and Neuroscience majors. During the 2014-2015 academic year, one academic advisor conducted over 800 in-office advising sessions for Psychology majors alone.

Satellite Program in Behavior Analysis

Students with undergraduate degrees in psychology and related disciplines (e.g., special education), which have included five courses of highly specified content, and 750 hours of supervised practice, are eligible to take a standard exam and, if successful, become Board Certified Assistant Behavior Analysts (BCaBA). This credential is delivered by an independent professional credentialing entity, the Behavior Analyst Certification Board, and is recognized internationally.

Historically, undergraduate degree programs in psychology have not included the curricular elements required for this credential. Hence, students with undergraduate degrees already in hand have had to supplement their education to achieve it. The Satellite Programs in Behavior Analysis have provided the five 3-credit courses and supervised experience needed to meet these requirements. The curriculum for this program is recognized by the *Behavior Analysts Certification Board*.

No undergraduate course sequences pursuant to BCaBA credentialing have been offered through the Satellite Programs over the review period. The Behavior Analysis Program has enhanced its undergraduate offerings to include the course sequence required for this credential however. This information is included in the Behavior Analysis Program section of the Psychology Department's self-study.

Part III: Graduate Courses and Degree Program(s)

Each graduate program (CBS, Behavior Analysis, Clinical, and Neuroscience) will be reviewed in total as a unit in order to make a coherent report of the findings. All of the departmental graduate courses, their descriptions, and the Student Learning Outcomes are tabled in Appendix II.

III Part A- Cognitive and Brain Sciences (CBS)

III.1 Graduate Program Organization, Objectives and Effectiveness

The program in Cognitive and Brain Sciences is dedicated to high-level professional education at both the graduate and undergraduate levels. Students work closely with professors in a mentorship model on critical problems in the psychological neurosciences. These studies further our understanding of the neurological bases of cognition, perception, and behavior. All faculty members within the program maintain active research laboratories in which multiple graduate students and undergraduate students participate in all aspects of research - from identifying important questions to explore; to designing appropriate experiments to address them; to the collection, analysis, and reporting of research data. Faculty in the Cognitive and Brain Sciences area also provide significant contributions to the undergraduate neuroscience major through both courses offerings and research training.

Relation of the CBS program to the needs of the state, nation and other programs

Since the previous program review, the CBS area has undergone significant changes in its faculty size, research specializations and resources. At the time of our last program review there were six tenure-track faculty lines in the program. We currently have seven tenure track lines, four of which are new faculty hires since the previous review (three replacements and one new track). Within twelve months this number will grow to nine faculty lines with plans for two additional faculty within three years. As anticipated, this turnover and growth has greatly shifted the focus of our faculty research. Most faculty in the area utilize modern functional imaging techniques in at least a portion of their work, and we now have access to these techniques through new equipment purchases as well as our recently established collaborations with Renown Medical Center. In addition, a computer lab focused on analysis of imaging data has been added as part of the large COBRE grant acquired by Dr. Michael Webster. Our goal is to provide cutting edge technological training and research skills to our undergraduate and graduate students in this high growth field. Functional neuroimaging is a high growth, research and employment field in both the experimental and medical domains. Training in these techniques is currently in high demand amongst our undergraduate and graduate students.

In addition, the CBS program is directly invested in the recently established Neuroscience Undergraduate and graduate degrees. All of the faculty in CBS are also part of the Neuroscience Program faculty and teach classes that fulfill course requirements in the Neuroscience Program. We contribute research expertise to the program in two critical areas: functional neuroimaging of neurotypical and patient populations, and behavioral assessment of human brain functions (cognitive neuroscience).

Faculty and faculty advising

All faculty members in CBS are directly mentoring and advising multiple graduate students. The program is organized around individual faculty labs and operates on a mentor model in which students are based in their advisor's labs. Students are encouraged to become involved in laboratory research as soon as they arrive. First year students are required to become involved in either an existing or new research study, in preparation for an area Spring conference in which they present their research question, the study design and any data that may have been collected.

CBS service courses offered

Our graduate seminars are designed to keep students knowledgeable of current and important developments in the field. Examples include recent seminars in Cognitive Neuroscience and the Neuropsychology of Autism Spectrum Disorders. The program recognizes the increasing importance of computer proficiency in research and has developed new courses specifically designed to teach students how to program experiments and implement standard psychological paradigms (e.g. reaction times and thresholds) using research-oriented programming languages, such as MatLab.

CBS also contributes teaching to the graduate statistics series that is taken by many students outside the Psychology department. In addition, the 600 portion of 400/600 level courses are provided as service courses to graduate level students who are primarily outside of our program. These courses include Physiological Psychology (PSY 603), Perception (PSY 605), Cognitive Psychology (PSY 616), Computer Applications in Social and Behavioral Science (PSY 627), Learning and Memory (PSY 632), and Advanced Special Topics (PSY 699).

CBS graduate program requirements

The M.A. and Ph.D. programs in Cognitive and Brain Sciences follows the general graduate school requirements as detailed in the University catalog.

Students are expected to progress through the program by the following deadlines; failure to meet any deadline requires a program review and director approval and may result in probationary status and loss of funding.

Expected Progress of CBS Students

Declare primary advisor	end of 1 st semester
MA comprehensive exam	end of 2 nd year
MA proposal	end of 5 th semester (2.5 yrs)
MA defense	end of 3 rd year
PhD committee formed	end of 4 th year
PhD proposal	end of 5 th year
PhD comprehensive exam	end of 11 th semester (5.5 yrs)
PhD defense	end of 6 th year

1. Dissertations and Theses Requirements

For the Master's Degree, students in the Cognitive and Brain Sciences Program are required to complete a thesis. A first authored publication submitted or accepted for publication, and based on the committee-approved thesis research, can be substituted in place of a traditional thesis.

For the Ph.D. Degree, students are required to complete a doctoral dissertation and to have obtained a Master's Degree (either from the University of Nevada or from some other accredited institution). Each student must secure an advisor – a program member who agrees to serve as Chair of the advisory-examining committee for the student's M.A. thesis or doctoral dissertation – by the end of the first semester of graduate work at UNR. All theses and dissertations must be chaired or co-chaired by a regular faculty member of the program. Students should also select a dissertation committee relevant to their topic of research. The dissertation committee must include at least two regular faculty from within the program. This committee must approve the student's program of studies, accept the proposal for the thesis or dissertation, and conduct the final oral examination. Written examinations are the primary responsibility of the Cognitive and Brain Sciences Program Faculty.

Dissertation proposals include a literature review, discussion of the proposed research questions and the methods and design that will be used to address them. The completed dissertation can include published or submitted papers in peer-reviewed journal articles as chapters, and at least one section of the dissertation must include material submitted or accepted for publication in the stand-alone format of a publication. Both the proposal and defense are subject to committee approval.

Thesis and dissertation defenses begin with a one-hour public talk on the applicant's research. This talk is treated as a "job talk" in which the student highlights the importance and significance of the work for an informed, but general audience. Directly following this presentation the committee meets privately with the candidate for an oral examination of their research work.

The advisory-examining committee for Master's degree candidates is assembled during the first year of study. During this initial period, the student must obtain approval of their program of study by this committee. The committee consists of at least three members of the graduate faculty. Two faculty members represent the student's area of specialization (both do not necessarily have to be from the student's department), and one faculty member is selected from the university "at-large."

For doctoral candidates, the student's primary advisor serves as the dissertation committee chair. The committee consists of at least five members of the graduate faculty: the committee Chair (advisor), at least two graduate faculty members from Psychology, at least one graduate faculty member in a field related to the student's major area of concentration, and at least one graduate faculty member from outside of the department who serves as the Graduate School representative.

2. Course Credit Requirements

Students are considered 'full time' if they register for 9 credits or more. Graduate assistants on half-time contracts are considered full-time students if they register for 6 or more credits. To remain in good standing all graduate students must register for at least 3 graduate-level credits

during each fall and spring semester until graduation. There are no minimum registration requirements during the summer. However, graduate assistants with summer assignments must register for at least one graduate-level credit per summer session to be exempt from FICA.

Students are expected to earn A's and B's in graduate courses. A student whose overall graduate GPA falls below 3.0 is placed on probation, and if the overall GPA remains below 3.0 for two consecutive semesters, the student is dropped from graduate standing. A student may reapply for graduate standing by eliminating the existing grade-point deficiency and achieving an overall graduate GPA of at least 3.0. In the Cognitive and Brain Sciences Program, a grade of C in any course is sufficient cause for review of the student's continuation in the program.

a. The M.A. Degree

M.A. students in the Cognitive and Brain Sciences Program are required to complete a set of 5 Foundation courses in appropriate subject areas and a set of 3 Methods courses. Students entering with an M.A. may substitute equivalent graduate courses from another institution to satisfy parts of this requirement. The applicability of transfer credits is determined by the program faculty and requires approval by the program director.

Students earning a Master's Degree must complete a minimum of 30 credits of acceptable graduate course work (courses with grades of "C" or lower will not be counted) as approved by the student's advisory-examining committee and the Cognitive and Brain Sciences Program Director. Students may also be required to complete a 3 credit course in teaching skills offered through the Excellence in Teaching Program. These credits cannot be used toward the 30 credit requirement for the M.A. degree in the program. At least 21 graduate credits must be earned in on-campus courses. Master's Thesis research (PSY 797) may be taken for up to six credits. A minimum of 18 credits of course work must be taken at the 700- level. The Graduate School does not have a foreign language requirement for the Master's Degree.

b. The Ph.D. Degree

A minimum of 72 credits is required for the Ph.D. Degree. At least 48 credits must be in course work (courses with grades of "C" or lower will not be counted), as approved by the student's advisory-examining committee and the Cognitive and Brain Sciences Program Director. A maximum of 24 credits is allowed for dissertation research (PSY 799). A student may apply up to 24 credits with grades of B or better from post-baccalaureate graduate studies in Psychology toward the doctoral degree. A minimum of 30 of the 48 credits of course work must be at the 700 level. Since not all 600-level psychology graduate courses will be accepted for the M.A. or Ph.D. degrees, students need advance approval for any 600-level courses taken in psychology, and for any graduate courses taken in related disciplines outside of psychology. The advance approval must come from the Cognitive and Brain Sciences Program faculty. As with the Master's degree, students may also be required to complete a 3 credit course in teaching skills offered through the Excellence in Teaching Program. These credits cannot be used toward the 72 credit requirement for the Ph.D. degree in the program.

3. Course Requirements

a. Foundation courses

The Cognitive and Brain Sciences Program provides a broad foundation to graduate students through a proseminar series that includes Comparative Sensory Neuroscience (PSY 709), Seminar in Sensation and Perception (PSY 720), Physiological Psychology (PSY 721), and Human Memory (PSY 729). In addition, seminars in Attention, Functional Magnetic Resonance Imaging, Neuropsychology of Autism, Vision, Object Recognition, Clinical Neuropsychology, Cognitive Neuroscience, Development and Plasticity in the Sensory Systems, and Evolutionary Psychology are offered under PSY 761, PSY 762, or PSY 763. Required courses are offered at least once every two years.

All students are required to complete five 700-level seminars in the different substantive areas of Cognitive and Brain Sciences represented by the program faculty. These courses are designed to provide background and breadth in different topical areas of the field and to prepare students for the comprehensive exam. To ensure breadth and adequate preparation for the exam each course should be taken from a different faculty member to meet this requirement, and the sequence should be completed within the first two years.

Students may substitute one seminar course from outside the program as part of their 5-course foundation requirement. The substituted course must be approved by both the student's advisor and program director. An individual faculty member can provide only one section of the MA comprehensive exam. Thus if a foundation course is substituted then the outside instructor must be willing to contribute and grade one section of the MA comprehensive exam based on their subject area.

b. Methods courses

Formal training in methodology includes the required Intermediate Statistics (PSY 706 & PSY 707), Experimental Design (PSY 710), Computer Applications in Social and Behavioral Science (PSY 427/627) which focuses on programming for experimental research, and Advanced Human Psychophysiology Lab (PSY 780) that provides hands-on instruction in modern recording of physiological responses such as the EEG, EKG, ERG, blood pressure, heart rate, galvanic skin responses, and evoked potentials. This course sequence is designed to provide students with hands-on training in the tools they will likely need to carry out their research.

In addition to these courses students must also complete at least one further lab-oriented methods or statistics course. Current examples of these courses include:

Intermediate Statistics II (PSY 707 or MATH 757)
 Experimental Design (PSY 710)
 Advanced Human Psychophysiology Lab (PSY 780)

Special Topics courses (PSY 761-763) may also be used to satisfy the requirement for the 3rd Methods course if they are taught as a lab-based methods course.

c. Research Requirements

All graduate students are expected to be involved in research. Students are encouraged to participate in research with faculty, with other students, and independently. Students may register for Graduate Research (PSY 752) and Individual Reading (PSY 755), and these credits can be used to fulfill degree requirements.

In addition, students are expected to make public presentations on the progress of their research work. Twice a year we hold mini-conferences in which students give 10 minute talks followed by 5 minutes of questions. This format is meant to emulate conference presentations. All students are required to participate, although students who have advanced to candidacy may not participate every year at the discretion of their advisor. We have also implemented a weekly brown bag series where students are able to give longer (60 minute) talks that are meant to emulate the format of a job talk or invited talk. All students are strongly encouraged to participate.

4. Comprehensive and Qualifying Examinations Requirements

The M.A. Comprehensive Examination is taken at the end of the spring semester during the second year of study. For students entering UNR without a Master's degree, the same examination serves as an M.A. Comprehensive and Ph.D. Qualifying Examination. However, a higher score is required for passing at the Ph.D. qualifying level. The Ph.D. Qualifying Examination must be passed before a student can be admitted to candidacy for the doctoral degree. This examination is designed to assess the student's familiarity with basic areas in Cognitive and Brain Sciences. The exam is given on two successive days during the Spring Semester, with each session lasting around 6 hours. The exam includes 5 topical areas administered by the program faculty and would normally correspond to the areas represented by the 5 Foundation courses the student has elected to take.

Areas covered on the exam may include:

Perception	Memory	Cognition
Evolutionary Psychology	Plasticity in the Brain	Cognitive Neuroscience
Comparative	Psychophysiology	Neuropsychology

Each question on the exam is scored on a scale from zero to five. The student must average 3.0 on the five exam sections to qualify for the Ph.D. program and a minimum of 2.75 to pass at the terminal M.A. level. A student who does not pass on the first try may be discontinued from the program, or may, on approval of the faculty, be given one opportunity to retake the entire exam on the next occasion it is administered. The following interpretations of the grading scale are used;

- 5 – Excellent: best or nearly best possible answer
- 4 – Very Good: more than sufficient quality to pass
- 3 – Acceptable: Minimum level for passing at the Ph.D. qualifying level

- 2 – Unsatisfactory: quality of answer falls short of the minimum passing standards
- 1 – Failure – answer is well below graduate student expectations
- 0 – No response given or a completely irrelevant answer

The scoring system described above is also used for grading the Ph.D. Comprehensive Examination. This exam should be taken as soon as possible after completion of any language and all course requirements, but no later than eight calendar months before graduation. The written portion of this exam is briefly described here. The requirement for an oral portion of the exam is fulfilled at the dissertation defense meeting, so students should be prepared both to present and defend the thesis, and to answer general questions in their area of specialization.

The Ph.D. Comprehensive Examination is designed to assess the student's proficiency in his or her primary areas of specialization. For this exam the student selects a major specialty area (e.g. conditioning) and a secondary specialty area, which is related to the first (e.g. comparative). Questions will only be drawn from the two declared specialty areas. The candidate is expected to demonstrate a high degree of sophistication within his or her areas of specialization. The Ph.D. Comprehensive Examination is prepared upon request of the student. The major advisor and participating faculty prepare the exam, and students should allow between 4- 6 weeks from their notification date to the actual examination date.

Students should be thoroughly prepared before attempting to take qualifying and comprehensive examinations. Members of the faculty responsible for constructing the examination may be contacted for recommended readings in relevant area.

5. Foreign Language Requirement for the Doctoral Degree

Ph.D. students must complete a foreign language requirement or substitute related graduate course work from outside the department. In either case, the course work meeting this requirement may not be included as part of the 48 credits of psychology course work required for the degree.

Alternative I: A student may complete 4 semesters with a grade of C or better of the same foreign language at the undergraduate level. The course work may be completed as an undergraduate before enrollment in the graduate program, or it may be completed while enrolled as a graduate student. Students who have learned a language other than English through other means may satisfy this requirement by demonstrating their proficiency to the satisfaction of appropriate faculty in the Department of Foreign Languages and Literature.

Alternative II: A student may complete 6 credits of course work outside of psychology while enrolled as a graduate student. Courses should be relevant to the student's research interests, and should be taken at the graduate level. In special cases undergraduate courses may be used if a high degree of specialized or technical background is required for entry into graduate courses for the related discipline. As with all graduate courses, students must earn grades of B or better to satisfy the requirement through this alternative. Specific courses proposed for this alternative must be approved in advance by the Cognitive and Brain Sciences Program faculty.

Curriculum development

At least once each year, and more frequently if warranted, members of the Cognitive and Brain Sciences faculty consider new courses, the revision of courses, and the elimination of courses. Program faculty meet each spring to review the program and decide on changes as a group. Student input and feedback of the program are actively encouraged.

Administrative structure

The program has a Director who reports to the Department Chair. The directors of each program also serve on the departmental executive committee. Department resources are allocated at the discretion of the chair to the individual programs. It is the responsibility of the director to organize annual CBS events, such as our spring and fall mini-conferences. In addition, the director oversees issues of space, new faculty hires, requests for resources, graduate student admissions, graduate student progress and evaluations, implementation of requests from the graduate school and any other issues that might arise.

In the Spring of 2016 the CBS area will be adding a half-time administrative assistant to the program. In addition to assisting the director, this position will assist faculty with IRB reviews and records, as well as grant submissions.

Advising and mentoring

The program is organized around individual faculty labs and operates on a mentor model in which students are based in their advisor's lab. All students have advisors and meet with them regularly.

Student learning outcomes

Theoretical Knowledge- Students will possess a thorough knowledge of basic theory and methods that forms the foundation of Cognitive and Brain Science.

<i>Student Performance Indicators</i>	<i>Assessment Method</i>
Learn basics of theory and methods through completion of core course requirements.	Faculty will evaluate performance and submit grades earned by each student for their respective courses.
Completion of written comprehensive exams in areas chosen by each of the experimental faculty.	Each faculty member will evaluate and submit grades reflecting each student's performance on the comprehensive exams.

Develop a working knowledge of ethical treatment of human and/or animal subjects in Cognitive and Brain Science.

<i>Student Performance Indicators</i>	<i>Assessment Method</i>
All students will enroll in an online human subjects (IRB) ethics course.	Successful completion of IRB ethics course.

Masters students will develop a working knowledge of the design, methods and procedures for Cognitive and Brain Science.

<i>Student Performance Indicators</i>	<i>Assessment Method</i>
Working knowledge of experimental design	Successful completion and defense of the

and methods.	Master's thesis proposal evaluated by committee.
Working understanding of experimental conduct, analysis, and presentation.	Successful defense of final Master's thesis evaluated by committee.

Doctoral students will develop skills and knowledge needed to independently recognize meaningful lines of inquiry, and to independently design and conduct experimentation in Psychology.

<i>Student Performance Indicators</i>	<i>Assessment Method</i>
Independent development of knowledge and skills for meaningful inquiry and experimental design.	Successful completion and committee approval of PhD dissertation proposal.
Development of skills needed to independently conduct original experiments.	Successful completion, defense, and committee acceptance of final PhD dissertation.

Acquire the skills and ethics needed to effectively teach courses in psychology to undergraduate level students.

<i>Student Performance Indicators</i>	<i>Assessment Method</i>
Acquired practical knowledge for teaching by successful completion of Teaching Assistant and/or Course Instructor assignments within the Psychology department.	Evaluated by students using student evaluation forms submitted each semester. Performance also evaluated by the instructor of the course (if not the graduate student).

Develop the skills and knowledge required to successfully compete for external funds and employment.

<i>Student Performance Indicators</i>	<i>Assessment Method</i>
Successful competition for funding and employment.	Record each student's grant/fellowship awards and record post degree employment placement.

Doctoral and Masters students will develop skills and knowledge needed to present scientific research in a professional and efficient manner.

<i>Student Performance Indicators</i>	<i>Assessment Method</i>
Developed skills for oral presentation at professional meetings and at UNR.	1) Successful oral presentation of Master's thesis and PhD dissertation. 2) Successful acceptance of abstracts and presentation of talks and/or posters for professional
Develop skills needed to present research in a concise and professional written form.	1) Successful completion of Master's Thesis and PhD Dissertation. 2) Submission and acceptance of manuscripts submitted to peer reviewed journals as a first or co-author.

Assessment of learning objectives

The Cognitive and Brain Sciences faculty meets in the Spring of each year to review performance results of each graduate student as well as the success of the program in meeting our student learning objectives. If our goals have not been adequately met, then the faculty address the problem through discussion of potential solutions that are typically implemented either through policy changes and/or curriculum modification. The director of the program is responsible for overseeing the implementation of assessment strategies. Each faculty member is responsible for monitoring their student's progress.

III.2. CBS Graduate Students

Student number and diversity

CBS currently has 23 students in the program. Of these, 9 are female and 14 are male. There are 4 minority students presently enrolled. Normative time to graduation, based upon the Expected Progress table (see above), is six years. For students that have received a degree from our program in the last five years, time to graduation averaged 5.6 years.

Recruitment

The Cognitive and Brain Sciences program sends out letters, advertises on the internet, makes personal contacts, works through the recruitment office, and attends conferences where the department/division is known.

Graduate students in Cognitive and Brain Sciences are recruited from Nevada, the United States and throughout the world. Four types of information are sought on prospective students: 1. previous transcripts of college work; 2. GREs; 3. letters of recommendations; and 4. a statement of purpose. These credentials, along with a student's past research experiences, are carefully reviewed by the entire faculty in Cognitive and Brain Sciences admission requires approval by a majority of the faculty through a formal vote.

Admission Requirements

In order to qualify for admission, a candidate must have earned a baccalaureate degree (or equivalent) from an accredited institution. An undergraduate major in Psychology is not required for admission. Those who hold a Master's Degree in Psychology may apply up to 24 credits towards the Ph.D. degree. For those who do not hold a graduate degree, course work in related disciplines may be used to satisfy these requirements and may be accepted as transfer credits. Students wishing to fulfill degree requirements with past graduate course work must have the approval of their primary advisor, the CBS area director, and the graduate school.

For International Students coming from countries where English is not the primary language, scores from the Test of English as a Foreign Language (TOEFL) must be submitted. A score of at least 500 is required for admission by the Graduate School. Students who have achieved a TOEFL score of 600 or higher are exempt from Intensive English Language Center evaluation. A TOEFL score of 550 or higher is the minimum necessary for a student to be approved for a teaching assistantship. TOEFL scores are not required for international students who have received a baccalaureate or advanced degree from an accredited university or college in the United States.

Student Funding

The CBS program is currently allocated 7.5 twenty hour teaching assistant (TA) slots and this number will increase slightly as new faculty are hired into our area in the coming year. These TA positions are distributed among the students on a need and competitive basis. Additional student support is provided in the form of research assistantships which are supplied through grants and other sources awarded to the faculty advisors. In the current academic year faculty have funded 8 twenty-hour research assistantships.

Academic enhancement through seminars

The Cognitive and Brain Sciences Program provides a broad foundation to graduate students through a pro-seminar series that includes Comparative Sensory Neuroscience (PSY 709), Seminar in Sensation and Perception (PSY 720), Advanced Psychophysiology (PSY 721), and Human Memory (PSY 729) and as well as seminars in Attention, Functional Magnetic Resonance Imaging, Neuropsychology of Autism, Vision, Object Recognition, Clinical Neuropsychology, Cognitive Neuroscience, Development and Plasticity in the Sensory Systems, and Evolutionary Psychology (these courses are offered under PSY 761, PSY 762, or PSY 763). Formal training in methodology includes the required Intermediate Statistics (PSY 706 & PSY 707), Experimental Design (PSY 710), Computer Applications in Social and Behavioral Science (PSY 427/627) which focuses on programming for experimental research, and an Advanced Human Psychophysiology Lab (PSY 780) that provides hands-on instruction in modern recording of physiological responses such as the EEG, EKG, ERG, blood pressure, heart rate, galvanic skin responses, and evoked potentials.

Student involvement in curriculum and governance

Faculty welcome student input regarding curriculum and governance. The graduate students in the CBS area maintain a Cognitive and Brain Science club that includes an elected president, vice president and treasurer. The club currently has 19 members and is run without the assistance of faculty in our group. Besides running a journal club, each year they have used funds from their organization to bring in outside speakers of their choosing. This group also discusses graduate student needs and concerns when they arise. Although a graduate representative is invited to attend faculty meetings, we have not been proactive about this, a point that I will return to in the assessment section. In addition, there is currently no formal process for resolving graduate student grievances. Partly because these are not frequent or are typically handled outside of administrative channels.

Student advising

Graduate academic advising is accomplished primarily through individual mentorship with their faculty advisor. In addition, a departmental advisor, who's main duty is to advise undergraduate students, may also help with graduate advising when needed. Conflicts between advisor and students are resolved incrementally through direct communication between parties, with the aid of the program director, the department chair, and ultimately the Dean of the Graduate School, if warranted.

Student output

Research training and productivity in the program are best evidenced by the frequent participation of program faculty and students in regional and national conferences, and

publications in peer-reviewed journals. Students in the program contribute regularly at a number of conferences, including the Association for Research in Vision and Ophthalmology, the Optical Society of America, the Society for Neuroscience, the Society for Cognitive Neuroscience, the International Meeting for Autism Research, Vision Sciences Society, and the Rocky Mountain and Western Psychological Associations.

Complete quantitative data for the past seven years is not available, however during the 2014-2015 academic year our graduate students made 20 separate presentations at national and international meetings and authored 14 publications that are either in print, in press, or in submission.

Graduate Placement

Most of our graduate students find placement in academic settings following graduation. Many continue at research institutions and some choose to focus on teaching institutions. Reliable quantitative data on graduate student placement and employment history over the last seven years is not available, however since 2011 we have had 14 students receive a PhD degree from our program. The majority of these students have gone on to postdoctoral positions at high-level institutions, including: The MIND Institute, University of California, Davis; the Kennedy-Krieger Institute; Georgetown Medical School; the University of Missouri; Ecole Normal Supérieure, Paris, France; Brown University; McGill University; and the Stanford Alzheimer Research Center at the Palo Alto Veterans Administration Hospital.

In addition, several of our doctoral students have taken faculty positions at Ohio State University; Yasir University, Izmir Turkey; Kutztown University of Pennsylvania; and the University of Rio Grande in Rio Grande Ohio. Both the quality of postgraduate placements and the proportion of doctoral students obtaining postgraduate placement in their field of interest has increased.

3. Analysis

The Cognitive and Brain Sciences Graduate Program has undergone a great deal of change since the last program review. Because of retirements and attrition, only three of the six faculty members that we had at that time remain. We have run multiple searches and have replaced the three positions and added a seventh. In the coming year we will have two additional new lines (one through the neuroscience program) plus two positions that will be filled in subsequent years. Previous issues regarding our dire need for space to accommodate our growing program are on the cusp of being solved. Psychology will acquire a significant number of offices and potential lab spaces as other departments are shifted out of Mack Social Sciences. The large COBRE grant for the Integrative Neurosciences has also had a significant impact on our program, through better equipment access, more research assistantships, and a generally higher level of resources. Shared equipment within the program now includes a high density EEG system, a fNIR functional imaging system, and a data analysis suite tailored to processing and analyzing functional imaging datasets. Our growth has been focused in a new direction and we will continue to make hires that bring modern technical expertise and high-level research faculty to our students.

Despite this remarkable level of expansion and refocusing, there are several specific areas where improvements to the program might be made:

1. In our last program review it was noted that we did not have the resources to track and maintain detailed information about our graduate students. Because of this, very little information regarding student productivity and post-graduation success was supplied in that review and only incomplete information is available for this review. Recently a new database, that is maintained by the program director, has been implemented with partial information on our graduate students extending back to 2011. In addition, our area has recently been approved for a 20-hour academic assistant that will start in the Spring of 2016. One of the charges of this new position will be to collect and track student information post-graduation and to keep a formal database of our current and past students. Databased information in this expanded effort will include a student's most recent known contact information, publications and presentations made while a graduate student, thesis information, post-graduate employment and professional profiles from ResearchGate. Additionally, complete information will also be maintained for the small number of students who leave our program with a terminal Master's degree and we will begin to formally track student qualifications at entrance into the program (e.g., undergraduate institution, GPA, GRE) to better determine what factors are significant predictors of a student's ultimate success.
2. Student representation and grievance resolution – Although graduate student representation at the area level and grievance resolution are written into our 'handbook' we could be doing better with its implementation. In conjunction with the Graduate School we would like to develop an updated conflict/grievance resolution process that takes better advantage of existing resources at the university and better aligned with current expectations at the university level. Related to this, is the issue of graduate student representation at the area level. In the coming months we have the graduate students formally select a representative to the area and the area director. This individual will serve not only as a conduit between the graduate students and area faculty, but will also assist the area faculty with developing policies and practices that encourage graduate student participation in area governance.
3. Professional development – Although our graduate program includes opportunities for professional development (e.g., public presentations, yearly short talk presentations at our biannual mini-conference, brown bag presentations by students, and conference travel), we have not in the past explicitly taught professional development skills, which are critical to student's continued success in the current competitive job market. Currently a new graduate level course is being created that will provide students with strategies for postdoctoral training, job application preparation, job talks, job interviews and other professional issues that they can expect as an academic. Specific details of this course and whether it will be added to our course requirements for doctoral students still need to be determined.
4. Diversity Recruitment Efforts -- Although our graduate students are somewhat diverse, we currently do not make a concerted effort to attract diversity applicants. In the future,

we would like to advertise our program through fliers/posters and announcements sent to other institutions, especially those with large minority groups. These types of fliers are commonly used by other institutional programs that are similar to ours and may help to attract high-quality and diverse applicants. Printing costs, funds for covering these advertising materials, and specific design requirements will need to be addressed.

III Part B - Behavior Analysis Graduate Program

Behavior Analysis Graduate Program

III.1 Behavior Analysis Graduate program organization, objectives and effectiveness

Behavior Analysis overview of objectives and mission

Behavior Analysis is distinguished by a unique philosophical, theoretical, and methodological orientation. The philosophical orientation of the program is one of naturalistic monism. Historical and contextually-situated behavior-environment relations constitute its subject matter. Its method is experimental, with aims of description, prediction and control of its subject matter. It has also a distinctive, widely applicable, and effective technology.

The mission of the Behavior Analysis Program is to strengthen Behavior Analysis as a scientific discipline and as a professional occupation. These objectives include:

1. To preserve the accumulated knowledge of behavior science by imparting it to others.
2. To develop the science of behavior through the production of new knowledge.
3. To contribute to the betterment of society by the application of this knowledge.
4. To assure the viability of the profession through participation in its governance.

The program also has process goals that we feel need to be accomplished to produce these outcomes.

Goal 1: To assure the survival of the Behavior Analysis Program.

The Behavior Analysis Program operates on a self-capitalization model, wherein faculty have revenue generating responsibilities in addition to regular academic duties. The survival of the program depends on the success of this model, and its transformation over time into a more stable system with adequate state support. A necessary condition for the accomplishment of the program's mission is the survival of the program which is more at risk than in the normal situation due to the lack of state support.

To accomplish this goal we have engendered conceptual support for the program from the discipline by way of published articles and chapters on the program model. We are also attempting to secure greater support from the university for the program's stability and security. In addition, we have engendered support for the program from the Department of Psychology by contributing to departmental service and by teaching a substantial number of undergraduate courses (in particular, Introductory Psychology.)

The survival of the program is not a sufficient condition for the accomplishment of its mission, however. Strengthening the discipline and profession of Behavior Analysis entails operating in such a manner as to demonstrate continuous improvement in the program's effectiveness in achieving this outcome. Hence, a second overarching goal is:

Goal 2: To demonstrate continuous improvement in program outcomes indicative of the accomplishment of its mission.

We have been collecting data now for 19 consecutive years on student (and faculty) scholarly activities, (e.g., publications, presentations), academic milestones (e.g., theses, dissertations), training experiences (e.g., practica, stipend), financial outcomes (e.g., revenue generation, expenses), and participation in governance and related service roles in the discipline. These data are collected three times per year (fall, spring and summer) and are presented at our annual summer faculty retreat and at our annual summer student-faculty retreat. The data are used primarily to set targets for growth at both a programmatic level and at the level of the individual student (and faculty member).

Finally, to accomplish these first two goals, it is necessary to enlist the participation of all program members, and to do so in such a way as to foster enthusiasm and collegiality. Hence a third overarching goal of the program is:

Goal 3: To engage all program participants in a genuine partnership, dedicated to the achievement of the program's mission.

The program operates on an open-book management model in which all scholarly, training, financial and participatory data are shared within the group. Students are included in this process and are intimately involved in policy and decision making, both formally and informally.

Objective 1: To preserve the accumulated knowledge of behavior science by imparting it to others.

Means

- 1.1. Recruit, support, develop, and retain qualified faculty
- 1.2. Attract, support, develop, and graduate qualified students
- 1.3. Develop and deliver a comprehensive curriculum
- 1.4. Recognize teaching effectiveness
- 1.5. Recognize learning gains
- 1.6. Place doctoral graduates in doctoral degree positions and doctoral granting programs
- 1.7. Place masters' graduates in masters' positions and programs

Objective 2: To develop the science of behavior through the production of new knowledge.

Means

- 2.1. Secure resources to support research/scholarly activity
- 2.2. Provide opportunities to engage in research/scholarly activities
- 2.3. Provide training and supervision in the production of new knowledge
- 2.4. Conduct, present and publish significant basic and applied research
- 2.5. Produce, present and publish significant theoretical and philosophical treatises
- 2.6. Recognize advisement of research/scholarly achievements
- 2.7. Recognize research/scholarly achievements
- 2.8. Place graduates in research/scholarly positions

Objective 3: To contribute to the betterment of society by the application of this knowledge.

Means

- 3.1. Secure resources to support the application of knowledge
- 3.2. Provide opportunities for the application of knowledge
- 3.3. Provide training and supervision in the application of knowledge
- 3.4. Sustain interchange between the science of behavior and its application
- 3.5. Recognize management of effective practice
- 3.6. Recognize effective practice
- 3.7. Place graduates in applied positions

Objective 4. To assure the viability of the profession through participation in its governance.

Means

- 4.1. Hold offices in the professional associations of the discipline
- 4.2. Hold offices in the professional publications of the discipline
- 4.3. Provide opportunities for involvement in governance activity
- 4.4. Recognize participation in governance activity

Relation of the Behavior Analysis Program to the needs of the state, nation and other programs and any related changes

The Department and its programs embrace the mission and objectives statement of the University as a whole. We believe that our mission fits closely with the major aspects of the University, including a commitment to quality, a commitment to diversity, a commitment to teaching and teaching innovation, a commitment to outreach, and a commitment to research. The University of Nevada, Reno is at its core a “land grant” university, and as such has a major commitment to the education and training of Nevadans. The Behavior Analysis program is active nationally and internationally and is recognized at these levels. We also are extensively involved in the provision of clinical and educational services at the local and state level. This is in coordination with the university’s mission “byte” of “state-wide, world-wide”.

The Behavior Analysis Program contributes to the Department’s and University’s goals in several ways. First, the faculty and students add to the knowledge base of the science in theoretical, philosophical, basic, and applied scientific contributions by presentations at regional and national conferences, and publications in books and journals. These activities establish and support the values of critical thinking and scientific inquiry in our students. Second, students collaborate with faculty to initiate research and services grants to generate support for research and clinical service activities. Third, our program provides direct clinical, educational, and consultation services to persons in Northern Nevada. This activity requires our students to apply the principles they learn and manifest the program values in ways that directly benefit the community in which we live. All students are members of research laboratories, clinical supervision teams, and providers of direct services to a variety of populations that constantly maintain the link between generation and application of knowledge. As our students move through and beyond the program, they continue to generate an application of knowledge.

Number of faculty in the program, number of faculty actively advising students at this time, average number of advisees per active, standard deviation of advisees per faculty, historical trends in student/faculty advising.

The Behavior Analysis program currently has 6 faculty members who are fully supported by the state appropriated lines. Five faculty members are tenured, and one (Dr. Matthew Locey) occupies a tenure track line.

D = Doctoral. M = Masters.

Pat Ghezzi: 16 advisees 2013 2012 2010 2012 2009 2013 2012 2013 2011 2015 2011 2012 2014 2013 2003 2014	Matthew Locey: 1 advisee 2015
Linda Hayes: 10 advisees 2007 2011 2014 2011 2010 2012 2013 2011 2013 2011	W. Larry Williams: 14 advisees 2007 2014 2009 2013 2015 2013 2007 2015 2015 2007 2009 2015 2015 2008
Ramona Houmanfar: 10 advisees 2015 2011 2015 2011 2014 2013 2015 2015 2008 2015	Steve Hayes: 1 advisee 2007
Average 8.7	Standard Deviation 6.37
52 current students, 19 MA, 33 Doctoral	

2015 Students graduated as of Fall 2015 (including year of admission)

Year of Admission	Name	Degree Earned	Advisor
2011		Master's	Linda Hayes
1996		Ph. D	Ramona Houmanfar
2009		Master's	Pat Ghezzi

The Behavior Analysis Program operates under a typical “mentorship” model. Graduate students are considered as junior colleagues. Newer graduate students also learn from senior students. Students are accepted into the program by specific faculty who have the same interests and resources to support new students in their respective lab groups. All acceptances however are still reviewed and agreed upon by the Behavior Analysis Training Committee which is composed of all faculty.

Historically, students were admitted to the program without assignment to an advisor. The program Director counseled new students during the first semester as they attended all labs, and then in a mutual fashion with faculty, decided on a specific faculty mentor and lab. As the program has matured, and there is need for equitable distribution of resources, a traditional mentorship model has been adopted as of this year.

Analysis of Behavior Analysis course offerings and how they contribute to the overall design of the curriculum

The Doctoral Program seeks to establish competence in six areas. These areas and the courses related to them are listed below. The Masters’ program is primarily an applied program. The Masters’ curriculum is indicated by an *. Courses offered every year or every other year are indicated by 1 or 2 respectively.

- 1) Behavioral theory/philosophy
 - Radical Behaviorism*² (PSY 673)
 - Seminar on Philosophical Psychology² (PSY 708)
 - Behavior Analysis of Language & Cognition² (PSY 747)
 - Special Topics in Behavior Analysis (PSY 760)
 - Comprehensive Examination (PSY 795)
- 2) Applied behavior analysis
 - Ethics in Psychology*¹ (PSY 695)
 - Behavioral and Systems Assessment*¹ (PSY 713)
 - Special Topics in Behavior Analysis (PSY 760)
 - Behavioral Management and Consultation* ² (PSY 767)
 - Behavioral Systems Analysis² (PSY 769)
 - Behavioral Interventions*¹ (PSY 783)
 - Comprehensive Examination (PSY 795)
- 3) Experimental analysis of behavior
 - Principles in Behavior Analysis*¹ (PSY 609)
 - Experimental Analysis of Behavior¹ (PSY 711)

Special Topics in Behavior Analysis (PSY 760)
Comprehensive Examination (PSY 795)

4) Practical Applications

Behavior Analysis Practicum I*¹ (PSY 766)
Behavior Analysis Practicum II*¹ (PSY 768)

5) Research Methods

Applied Research Methodology I ² (PSY 723)
Intermediate Statistics I² (PSY 706)

6) Research

Thesis* (PSY 797)
Graduate Research (PSY 752)
Dissertation (PSY 799)

7) Breadth

History of Psychology² (PSY 608)
Electives in Psychology or Other Discipline

Methodologies used to develop curriculum and plans of study for Behavior Analysis graduate students.

The doctoral program is designed to ensure that graduates are well versed in theoretical, basic and applied Behavior Analysis. The Doctoral curriculum essentially includes the Masters curriculum which is designed to satisfy the requirements for the Behavior Analysis Certification Board Certification.

Once a year the faculty of the Behavior Analysis program participate in a retreat for the purposes of analysis and planning of Behavior Analysis curriculum and program activities. Analyses are undertaken to eliminate duplication of material in courses, and to adjust courses with current content as the field develops. A student-faculty retreat is also convened once a year.

The Behavior Analysis Training Committee, composed of all behavior analysis faculty and two student representatives, determines policy and makes decisions on substantive issues, including changes in general policy and program requirements. Decision-making is participative, with significant input from everyone, including the students. These meetings occur weekly. The curriculum is reviewed yearly at annual faculty retreats, and changes are noted in student handbooks.

Required or critical elective courses for each Behavior Analysis degree

The Master's program requires 36 credit hours and the Doctoral program requires 86 credit hours. There are no elective requirements to fulfill the master's degree. Six elective credits are required to fulfill the doctoral degree. Three of these six credits are considered "Special Topics in Behavior Analysis" and are fulfilled by completing a one credit course each summer for three

summers as part of the program's "Summer Scholar" series. The table of course offerings above indicates the frequency with which each course is offered. The curriculum for each degree is available on the last pages of the Doctoral and Masters handbooks which are supplied as attachments.

Note: As of 2008 Doctoral students entering the program without a recognized Master's thesis, no longer have the option to complete a "pre-doctoral" research study and they must complete a formal Master's Thesis and receive a Master's degree on the way to the Ph.D.

Administrative structure of Behavior Analysis program and relation to department structure

The Behavior Analysis program is one of three graduate programs in the department of psychology. It is managed by a program director who is elected from the Behavior Analysis faculty for a three-year term. The director represents the program as a member of the department executive committee which is composed of the three graduate program directors, the chair of the department and the associate chair appointed by the department chair. The elected program director is approved by the Chair and the Dean of the College of Liberal Arts.

The program director chairs regular (weekly or bi-weekly) meetings of the Behavior Analysis Training Committee (BATC) composed of all Behavior Analysis faculty and 2 representative students elected from the Doctoral and Masters students respectively. The BATC manages the regular student stipend and practicum placements, course curriculum, allocates department resources and teaching opportunities, schedules and oversees comprehensive exams, thesis and dissertation proposals and defenses, and the programs annual admissions and acceptance process (including the election of 2 further student representatives to help conduct that process). Specific student issues with their standing, grading, or placement, as well as personnel issues of any nature, are considered by the BATC without the presence of the student representatives.

The BATC elects faculty to sit on the Department Annual Merit Review Committee, the Department Bylaws Committee, and our own Admissions Committee, on an annual basis. We also establish a program "Public Relations" Faculty, and a student web page editor annually.

The Behavior Analysis program maintains typically 2 classified administrative positions and often further graduate or undergraduate stipend positions to conduct the Administrative business of the program as well as to coordinate and maintain our considerable financial operations. These personnel are interviewed and accepted by the BATC and attend regular BATC meetings, reporting on Behavior Analysis office issues and a wide variety of accounting and other employment processes and issues for our research and service grants and contracts. The program is charged indirect costs on our contracts, including monies spent on our own accounting and office personnel. Contracts are all overseen by the University Office of Sponsored Projects, but maintained daily by our accounting personnel.

Behavior Analysis faculty and students are recipients of any financial or other resource benefits that the department gains in our capacity as department members. Teaching opportunities for graduate students are determined yearly by the executive committee.

Advising, mentoring, and student governance procedures used in the program

As described above, students are accepted into the program and advised by a specific faculty mentor. Although individual styles vary, all faculty hold weekly lab meetings and meet regularly with their students individually. All student interactions with the Behavior Analysis Training Committee, which oversees the normal operation of the program, occurs through the advisor, and therefore with his or her knowledge.

On a monthly basis all faculty and students meet in a Behavior Analysis Program Meeting (BAP). This Meeting is preceded by a student meeting chaired by the student BATC representatives. General program issues relevant to the students are derived and discussed in these meetings and communicated to the faculty in the Bap or in the BATC. The BAP is also a forum for presentation of project and other program information and issues, including financial issues. Specific research, clinical, educational or consultation projects, including financial issues, are often presented to the whole program. The BAP is also regularly the forum for the program's ongoing "Total Performance Management" system which monitors all faculty and student projects, finances, academic, and scholarly objectives and progress toward those objectives on a trimester basis.

At least annually, the program organizes a Behavior Analysis Research Fair at which all faculty labs have a research project presentation by students.

Students at masters and doctoral level, number of faculty participating, and total number of students.

This information is available in the tables above. Masters students comprise 38% of our program and doctoral students 62%. As can be seen, the program currently has 33 doctoral and 20 master's students, having graduated 2 doctoral and 2 master's students so far this year. The program has 6 dedicated faculty. The most recent addition has been plus Dr. Steven C. Hayes, who for many years was a part of the Psychology Department's Clinical program. He is currently a chair on 1 student dissertation project. The average number of students per faculty lab (8.8) and the standard deviation (6.62) were calculated based only on the 6 dedicated Behavior Analysis faculty labs. The need for additional faculty in the program is seen from this table.

An analysis of the average time in the program for all current Masters students not including students admitted this year, indicates an average time in the program of 2.7 years. The similar average time in the program for the current doctoral students is 2.25 years.

Student Learning Outcomes

Master's Program

The assessment plan for our Master's degree program calls for monitoring of specific performance indicators: Completion of core research methods course, core theoretical, basic and applied courses, practicum, and ethics course; attendance and active participation in weekly research meetings; successful proposal and defense of a Master's Thesis; knowledge of ethical standards of the field; participation in treatment development settings; Competence in applied clinical, educational and organizational settings; oral presentations; demonstrate knowledge of

and sensitivity to individual and cultural diversity; knowledge of research ethics; knowledge of research design; successful thesis proposal; career employment; successful completion of Masters research project; successful thesis defense; and written presentation.

The Behavior Analysis program faculty utilize the results from the assessment of these performance indicators to evaluate the adequacy of the program in achieving the goals set forth in our mission statement. Where the assessment data suggests we are lacking, the clinical faculty implement policy and curriculum changes judged to address any problems. Where the assessment data suggest the program is especially strong, the faculty attempt to determine how to implement those training features in other aspects of the program. The assessment process itself is reviewed by the clinical faculty. Results from assessments are used in future accreditation renewals.

Since our last Departmental review, the program has, based on these considerations, reduced the courses necessary for the Masters and Doctoral degree, made the participation in the Clerkship after thesis defense optional, applied for and attained BCBA accreditation, undertaken the conduct of an annual Behavioral Research Faire, and adjusted the measures and the frequency with which they are made on academic progress milestones and Scholarly production in our program wide Total Performance Measurement system. These changes appear to have been beneficial to our programs overall function

Overall indicators of the success in achieving the program outcomes can be summarized as time to completion, number of graduates, graduate placements. As is reported elsewhere in this document time to completion is lower over the past 7 years at approximately 5 years (from Behavior Analysis degree), number of graduates shows an increasing rate, and graduate follow up indicates that 90% of Masters graduates are employed in a Behavior Analytic position. Although we do not have access to similar data from other programs, employee reports indicate that our graduates are extremely competent and especially have “business” and “administrative” skills related to clinical practice that appear to be unique in their magnitude to our program graduates.

Doctoral Program

The Assessment plan for the doctoral program involves performance indicators of: Attendance and active participation in weekly research meetings; completion of core research methods courses, statistics sequence, core Theoretical, basic and applied courses, and elective courses; completion of 2 comprehensive exams to facilitate development of scholarly interests and broaden areas of expertise; knowledge of ethical standards of the field; participation in treatment development settings; competence in applied clinical, educational and organizational settings; Oral presentations; knowledge and sensitivity to individual and cultural diversity; oral presentation of research; knowledge of research ethics; knowledge of research design and statistics; successful dissertation proposal; career employment; successful completion of Masters or pre-doctoral research project; successful dissertation defense; and written presentations skills.

As with the Master’s program, the Behavior Analysis program faculty utilize the results from the assessment of these performance indicators to evaluate the adequacy of the program in achieving the goals set forth in our mission statement. Where the assessment data suggests we are lacking,

the clinical faculty implement policy and curriculum changes judged to address any problems. Where the assessment data suggest the program is especially strong, the faculty attempt to determine how to implement those training features in other aspects of the program. The assessment process itself is reviewed by the clinical faculty. Results from assessments are used in future accreditation renewals.

Since our last Departmental review, the program has, based on these considerations, reduced the courses necessary for the doctoral degree, applied for and attained BCBA accreditation, undertaken the conduct of an annual Behavioral Research Faire, Eliminated the Pre-doc and now require all doctoral students without a recognized Master's degree to complete one in our program, adjusted the requirements for the 2 comprehensive exams and adjusted the measures and the frequency with which they are made on academic progress milestone, scholarly production, and professional development in our program wide Total Performance Measurement system, and have assumed a traditional mentorship model. These changes appear to have been beneficial to our programs overall function.

Overall indicators of the success in achieving the program outcomes can be summarized as time to completion, number of graduates, graduate placements. As is reported elsewhere in this document time to completion is stable over the past 7 years at approximately 7 years (from Behavior Analysis degree). This is a 0.5 decrease in time to completion from the last program review. The number of graduates shows an increasing rate and graduate follow up indicates that 41% of Doctoral graduates are employed in academic / research university positions, and essentially the rest are employed in prominent clinical delivery organizations, or are independent consultants. Although we do not have access to similar data from other programs, employee reports indicate that our graduates are extremely competent and especially have "business" and "administrative" skills related to clinical practice that appear to be unique in their magnitude to our program graduates.

III. 2 Behavior Analysis Graduate Students

The quality, number and diversity of students entering the Behavior Analysis graduate program.

Since its inception the program has enrolled 108 Ph.D. and 61 MA students. 42 Masters degrees have been awarded and 75 Ph.D. degrees

Numbers of Students in the On-campus Graduate Programs

<u>Year</u>	<u>Doctoral Students</u>	<u>Masters Students</u>
2008-09	30	8
2009-10	25	13
2010-11	24	21
2011-12	19	18
2012-13	22	14
2013-14	24	13

2014-15	27	15
2015-16	33	19

Behavior Analysis Program: Number of Doctoral Student Applications and Number of Doctoral Students Admitted: 2008-2015

<u>Year</u>	<u>Number Applied</u>	<u>Number Admitted</u>
2008-09	28	11
2009-10	33	6
2010-11	13	2
2011-12	25	8
2012-13	33	1
2013-14	16	4
2014-15	23	1
2015-16	26	7
Total	196	40

Behavior Analysis Program: Number of On-Campus Masters Student Applications and Number of masters Students Admitted: 2008-2015

<u>Year</u>	<u>Number Applied</u>	<u>Number Admitted</u>
2008-09	15	2
2009-10	19	1
2010-11	17	0
2011-12	21	5
2012-13	18	6
2013-14	25	5
2014-15	23	3
2015-16	24	6
Total	162	28

Student Quality

Student growth in behavior analysis has not been accomplished at the expense of student quality. An increasing proportion of students applying to the doctoral program in behavior analysis have made scholarly presentations at professional meetings and has published in professional journals. In addition, graduate record exam (GRE) scores and grade point averages (GPA) of doctoral students have shown an increasing trend over years. For example, the average GRE total score (verbal + quantitative) for incoming doctoral students in 1990 was 990, compared to 1220 in 2015. The average GPA for incoming doctoral students in 1990 was 3.25 compared to 3.32 in 2015.

Behavior Analysis Program: Mean GRE Scores for Doctoral Students Admitted: 2008-2015

<u>Year</u>	<u>GRE (V)</u>	<u>GRE (Q)</u>	<u>GRE (T)</u>
2008-09	520	570	1090
2009-10	530	600	1130
2010-11	565	695	1260
2011-12	510	623	1133
2012-13	465	465	930
2013-14	552	610	1162
2014-15	440	520	960
2015-16	540	680	1220

Behavior Analysis Program: Mean Undergraduate GPA for Doctoral Students Admitted: 2008-2015

<u>Year</u>	<u>GPA</u>
2008-09	3.40
2009-10	3.50
2010-11	3.49
2011-12	3.49
2012-13	3.78
2013-14	3.39
2014-15	3.30
2015-16	3.32

Behavior Analysis Program: Mean GRE Scores for On-Campus Masters Students Admitted: 2008-2015

<u>Year</u>	<u>GRE (V)</u>	<u>GRE (Q)</u>	<u>GRE (T)</u>
2008-09	510	670	1180
2009-10	350	380	730
2010-11	(No MA students admitted)		
2011-12	468	566	1010
2012-13	482	597	1078
2013-14	506	566	1072
2014-15	457	523	980
2015-16	540	490	1030

Behavior Analysis Program: Mean Undergraduate GPA for On-Campus Masters Students Admitted: 2008-2015

2008-09	3.40
2009-10	3.28
2010-11	(No MA students admitted)
2011-12	3.39
2012-13	3.38
2013-14	3.23
2014-15	2.93
2015-16	3.37

Recruiting and admissions Behavior Analysis graduate program

The Behavior Analysis Program recruits undergraduates through its field experience classes, and in practicum/internship/career fairs on campus. The Program also recruits undergraduates through expositions and hospitality suites at regional and national conventions. The Behavior Analysis program is publicized at regional and national Behavior Analysis Conferences. We distribute posters to psychology programs throughout the country to attract outstanding students.

The Behavior Analysis program maintains an active web site that describes our program and essentially all of the labs and their relative interests and productivity. We participate at the annual Association for Behavior Analysis International conference as well as local and regional Behavior Analysis meetings with at least a poster presentation and recruitment efforts.

We maintain a standard admissions policy and procedures through the Department, which yields a number of applications each year. The program receives about 5 applicants for each available position. The Behavior Analysis Program admits 1- 4 master's students and 3-8 doctoral students per year. The Programs has the following admission criteria: Average GRE scores (verbal and quantitative): 1000 for master's students, 1150 for doctoral students. Average GPAs: 3.25 for master's students, 3.4 for doctoral students. Students submit their GRE scores, GPAs and transcripts, three letters of recommendation, and a brief autobiography, including a statement of goals.

Applications are reviewed, and according to the support available and the availability of positions in each faculty lab, and the interests and quality of the applicants, we invite some number of applicants for an "interview weekend". All students and faculty participate in this three-day event, where we host the applicants, and interact with them in both formal and informal settings. Immediately following this weekend, the faculty meet to decide on which applicants will receive offers of acceptance to the specific faculty labs, and the support that can be offered to those applicants.

For applicants who cannot attend the weekend, and for international students, we conduct telephone interviews. Student representatives participate in these interviews.

Under-represented groups (African American, Pacific Islanders and Hispanic) make up approximately 5%-10% of the students in the Behavior Analysis Program at any one time. No specific efforts have been made to recruit members of these groups.

Behavior Analysis has taken special steps to serve the needs of older or non-traditional students. Since the last review, our off campus operations have grown considerably. Employees who are currently serving the developmentally disabled population as a career at one of several Service agencies in Chicago, Toronto, St. Louis, Los Angeles, Fort Lauderdale, etc. have been offered courses that qualify them for a Masters' degree.

The Behavior Analysis Program has admitted a number of mid-career students into both its masters' and doctoral programs. The Master's program was established for this express purpose. Thirty percent of the on campus students are over 30 years old. All of the students in the off-campus cohorts are fully employed, most are older and mid-career.

The number of applicants to the program has remained stable over the past 7 years. The student applicants come from all parts of the United States as well as from a number of other countries. In 2015 we have 2 (6%) international students in the doctoral program and 8 (24%) of the doctoral students are from Nevada. In 2015 we have 16 (80%) of the Masters' students from Nevada.

Historical trends in graduate student assistance

The Behavior Analysis Program participates in the Department's allotment of GA positions. Typically, 3 positions are assigned to Psy 101 "SPIN" directed by Ramona Houmanfar. All other student support is provided by Behavior Analysis Faculty through research or service contracts, typically involving clinical behavioral services, organizational consulting, or teaching / training of individuals in Behavior Analysis in different forms of off-campus education offerings. We also have secured several "internship" positions with the state and service agencies. Each year, faculty decide upon the extent of funding to be offered to each student accepted into the program. No new student is guaranteed more than 1 year of funding. Continued student funding is determined on a case-by-case basis each year. Most master's students and doctoral students are funded through out self-capitalization efforts.

Extent to which students enhance their academic courses

All Behavior Analysis students participate in practicum training for their first year. Participating in practicum for a second year is optional for the students and on a case-by-case basis. This involves 10 hours per week in a clinical or research setting of supervised work. In most cases the practicum is an applied clinical or teaching experience that is directly "hands on". For those students in clinical areas this experience involves designing assessment and intervention programs, providing direct clinical services, modeling and teaching undergraduate students, training human services staff and parents, attending clinical planning and administrative interdisciplinary meetings, managing schedules and employee issues, teaching required human rights and health safety policy, etc. all such activities are supervised by faculty via regular team meetings and individual on-site interactions. Research practicum training involves designing and conducting research either in basic or applied settings, including all aspects of data collection

and variable manipulations, with regular guidance from faculty. In some cases, students serve in internship positions at human services agencies and are directly supervised by professional staff and meet regularly with the Behavior Analysis faculty who arrange the internship.

Some Behavior Analysis students have had the opportunity to travel to Saudi Arabia for 6 week periods to assist in the teaching of basic behavioral clinical skills to a cohort of nursing students regarding children with developmental disabilities.

Each summer we sponsor a 1 credit seminar series delivered by an internationally recognized behavioral scientist or practitioner. Our students have the opportunity to meet and interact with these individuals both in formal seminars and informally in social situations.

Students' involvement in program governance and curriculum

Student concerns about any aspect of the Behavior Analysis program are reviewed on a regular basis via

two student representatives on the Behavior Analysis Training committee. One of the activities of the two student representatives to the Behavior Analysis Training committee is the coordination of an annual survey of all active Behavior Analysis graduate students concerning faculty performance in the areas of community practicum and stipend-related work supervision, academic and research advisement, advisement on publication and professional presentations and general availability. All students are required to attend a monthly program meeting with the faculty. All students attend an annual retreat with faculty for the purposes of analysis and planning of all Behavior Analysis program activities. Student concerns are regularly raised at these meetings. Finally, upon completion of either the Master's or Doctoral degree, Behavior Analysis students participate in an exit interview concerning the strengths and weaknesses of the program.

Academic advising in the program

Students are advised as to what courses to take (within the restrictions of the necessary curriculum content for all students) by their advisor. Feedback and adjustments when necessary occur at the BATC with all faculty, at the BATC via student representatives, and with all students and faculty at the BAP.

Faculty review student progress during their annual retreats. Recently, a formal evaluation system for students has been established whereby students submit annual reports on their activities in the areas of scholarship, course work, practicum, and work, for comment and evaluation by the faculty.

Any disputes that may arise between a faculty and their student are encouraged to be resolved at that level. On the rare occasion that an issue continues, the student can bring the issue to the BATC or directly to the program director for resolution. Issues not solvable at this level are referred to the department chair and the regular university channels for such conflict resolution.

Student research output such as publications, citation indicators, and student awards over the past 7 years

Student Publications and Presentations

Behavior Analysis students routinely present papers and posters at regional and national behavior analysis conferences. These presentations are expected to begin in the students' first year of the program and to continue throughout. Many of these presentations are co-authored by faculty and other graduate and undergraduate students. Students are also publishing their work in refereed journals and books, although these achievements tend to occur more toward the end of their time in the program. Many of these articles and chapters are co-authored by faculty and other graduate students. Scholarly outcome data, including first-authored conference presentations and first-authored refereed publications, have been abstracted from students' vitas. These data are summarized below.

Behavior Analysis Program: Student First-Authored Publications and 1st authored presentations per faculty.

<u>Year</u>	<u>1st Authored Student Publications</u>	<u>1st Authored Conference Presentations</u>
2008-09	1.8	12.4
2009-10	0.6	5
2010-11	0.2	8
2011-12	2.4	12.6
2012-13	1.4	10.8
2013-14	1.8	16.4
2014-15	1.2	9.2
2015-16	1	7.5

Total student 1st author presentations and publications

<u>Year</u>	<u>1st Author Presentations</u>	<u>1st Author Publications</u>	<u>Co-Authored Publications</u>
2008-09	49	3	6
2009-10	62	9	2
2010-11	40	1	4
2011-12	63	12	2
2012-13	54	7	7
2013-14	82	9	10
2014-15	56	6	6
2015-16	45	6	5
TOTAL	451	53	42

Summary of graduates over the last 7 years and their employment history

Degrees completed in the Behavior Analysis Program 2008-2015*

YEAR	Masters	Doctorate
2008	12	1
2009	6	1
2010	8	1
2011	2	3
2012	2	4
2013	4	6
2014	5	4
2015**	2	1
Total	41	21

*Includes Doctoral students completing MA on the way to the Ph.D.

**Total in 2015 is only including Spring/Summer terms

The table below describes the current known positions for all 116 of the on campus Behavior Analysis Program Students who have completed a Masters or Ph.D. degree.

Masters: Of the 61 Master's program students, 20 are still students, and 41 are graduates (15 since 2008), four graduates have completed PhDs elsewhere and are now university faculty, thirty-two (73%) are employed as behavior analysts or other human services professionals, two are organizational behavior consultants, one an operation director for Walmart, and one a funding officer at UNR. Thirty-seven (90%) of the Master's program graduates are employed in behavior analysis related positions.

Doctorates: Of the 108 PhD students, 33 are still students, and 75 are graduates (38 since 2008). Of the graduates, thirty-one (41%) have research or teaching faculty university positions, 7 are employed by large human service agencies, 31 (41%) are behavioral consultants in some capacity, 3 are Psychologists, and 1 is an organizational development manager for BP. Sixty-nine (92%) of the Doctoral program graduates are employed in behavior analysis related positions.

Students in the Behavior Analysis Master's Degree Program

Student	Incoming Degree	Admission	MA awarded	Ph.D. awarded	Current position
	BA	1991	1993	...	District Business Manager, Purdue
	BA	1992	1997	...	Director of Development, University of Nevada Reno
	BA	1992	1994	...	Assistant Professor, University of Alabama at Birmingham
	BA	1993	1995	...	University professor
	BA	1993	1995	...	Behavior Analyst, Private Practice in Tennessee
	BA	1994	1998	...	Social Worker in Northern Nevada
	BA	1994	1998	...	Vocational Evaluator at DETR
	BA	1995	2005	...	Washoe County School Behavior Specialist
	BA	1996	2005	...	Organizational Development & Services Officer, H.S.I., Reno
	BA	1996	1998	...	Associate Professor Cal State Fresno
	BA	1996	2000	...	Behavior Analyst, Maine
	BA	1997	1999	...	Assistant Prof. U of Kansas
	BA	1997	1999	...	Executive Director, Behavior Analysis No Ka Oi, Inc.
	BA	1997	1999	...	Behavior Analyst & Owner, Teaching Together
	BA	1998	2003	...	Behavior Analyst, Learning Services Neuro-Behavioral Institute
	BA	1998	withdrew	...	unknown
	BA	1999	2005	...	Behavior Analysts, Vanderbilt University
	BA	2000	2005	...	Behavior Analyst, San Francisco
	BA	2000	2005	...	Clinical Director, STE Consultants
	BA	2001	2005	...	Behavior Analyst, Developmental Center, Tennessee
	BA	2001	2008	...	Executive Director/Behavior Analyst, Puzzle Pieces Autism and Behavioral Services
	BA	2001	2008	...	unknown
	BA	2002	2005	...	Behavior Analyst, Colorado
	BA	2002	2006	...	Regional Director/Behavior Analyst, ILAN/ABLS

	BA	2002	2008	...	Lead Behavior Analyst, Oklahoma Autism Network
	BA	2002	2004	...	Director of Change, Training, and Communications, Walmart
	BA	2002	2005	...	Behavior Analyst, Sacramento
	BA	2003	2007	...	Behavior Analyst, Los Angeles
	BA	2003	2005	...	Retail clothing manager
	BA	2003	2008	...	Behavior Analyst, Advanced Child Behavior Solutions
	BA	2004	2007	...	Behavior Analyst, Telecare Corporation
	BA	2004	2008	...	Owner/Behavior Analyst, Beug Behavioral Intervention and Counseling
	BA	2005	2008	...	Practicum Director, Spalding University
	BA	2005	2008	...	Behavior Analyst, Reno
	BA	2006	2010	...	Director, Academy of Precision Teaching
	BA	2007	2011	...	Behavior Analyst, Advanced Child Behavior Solutions
	BA	2008	2013	...	Behavior Analyst, Washoe County School District
	BA	2008	2011	...	Behavior Analyst, Applied Behavioral Technologies
	BA	2010	2013	...	Behavior Analyst
	BA	2011	2014	...	Behavior Analyst
	BA	2012	2014	...	Behavior Analyst, Reno
	BA	2003	2008	...	Behavior Analyst, Michigan
	BA	2009	2015	...	Behavior Analyst, Reno
	BA	2013	...	...	Master's student, University of Nevada
	BA	2012	...	...	Master's student, University of Nevada
	BA	2012	...	...	Master's student, University of Nevada
	BA	2013	...	...	Master's student, University of Nevada
	BA	2012	...	...	Master's student, University of Nevada
	BA	2013	...	...	Master's student, University of Nevada
	BA	2011	...	...	Master's student, University of Nevada
	BA	2015	...	...	Master's student, University of Nevada
	BA	2011	...	...	Master's student,

					University of Nevada
	BA	2012	...	...	Master's student, University of Nevada
	BA	2014	...	...	Master's student, University of Nevada
	BA	2014	...	...	Master's student, University of Nevada
	BA	2015	...	...	Master's student, University of Nevada
	BA	2015	...	...	Master's student, University of Nevada
	BA	2013	...	...	Master's student, University of Nevada
	BA	2014	...	...	Master's student, University of Nevada
	BA	2015	...	...	Master's student, University of Nevada
	BA	2013	...	...	Master's student, University of Nevada
	BA	2015	...	...	Master's student, University of Nevada

Students in the Behavior Analysis Ph.D. Degree Program

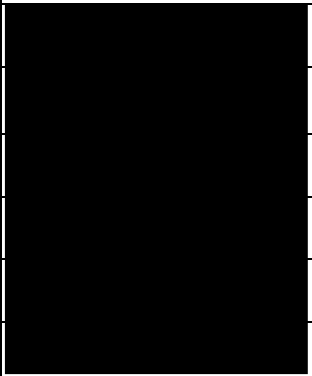
Student	Incoming Degree	Admission	MA awarded	Ph.D. awarded	Current position
	BA	1990	1995	1998	Assistant Professor, Missouri State
	BA	1990	1993	1998	Associate Professor, University of Nevada
	BA	1990	1992	1995	Associate Professor, U of Cal.Stanislaus
	BA	1991	1997	2005	Private Practice, Seattle
	BA	1991	1996	2001	Integrated Behavioral Healthcare, Reno
	BA	1991	2005	withdrew	Human Services, Orlando
	BA	1992	1992	2000	Behavior Analyst, Friant, CA
	BA	1993	1995	1998	Professor, Southern Illinois U, Carbondale
	BA	1993	1995	1999	Student advisor, Gonzaga U.
	BA	1994	1996	1998	Professor, Southern Illinois U, Carbondale
	BA	1994	1997	2000	Behavior Analyst, Connecticut
	MA	1994	n/a	2004	Youth Transition Director, University of Nevada
	BA	1994	1997	2000	Private Practice, Arkansas
	BA	1994	1995	1998	Professor, Florida

					Institute of Technology
	BA	1995	1998	1999	Professor, Utah State University
	BA	1996	1998	2000	Owner, Britton Behavioral Consulting
	BA	1996	1996	2005	Behavior Analyst, Dublin Unified School District
	BA	1996	2004	2015	Author/Self-Employed
	BA	1996	1998	2000	Clinic 4 Kidz, California
	BA	1996	2000	withdrew	Behavior Consultant, Nevada
	BA	1997	2005	withdrew	Therapist, Reno
	BA	1997	2002	2004	Psychologist, North Carolina
	BA	1997	1995	2008	Associate Director of Institutional Research, University of Mississippi
	BA	1997	2001	2005	Behavior Analyst, San Francisco
	BA	1997	2004	withdrew	Project Coordinator for PBS, University of South Florida
	BA	1998	2003	2008	Behavioral Analyst, Canada
	BA	1998	2001	2005	Fit Learning, New York
	BA	1998	Clinical 2000	withdrew	Psychologist, Vancouver, Canada
	BA	1998	2000	withdrew	Owner/Behavior Analyst, Foxy Learning
	BA	1998	2005	2008	Director/Behavior Analyst, Advanced Child Behavior Solutions
	BA	1998	2003	2002	Psychologist, Toronto Canada
	BA	1998	2005	2008	Southern Louisiana University
	BA	1999	2005	2009	Behavior Analyst, FitLearning
	BA	1999	2005	2006	Co-founder/Clinical Director, ABRITE Org
	BA	1999	withdrew	...	unknown
	BA	1999	2001	2004	Manager or Research and Development, CARD, Los Angeles
	BA	1999	2003	withdrew	Behavioral Consultant

	BA	2000	2001	2010	Clinical Regional Vice President / Behavior Analyst, Easter Seals
	BA	2000	2002	2006	Associate Professor, The Chicago School, Los Angeles
	BA	2000	2004	2007	Behavior Analyst, CARD, Phoenix
	BA	2000	2005	2007	Assistant Professor, Trinity College Dublin
	BA	2000	2003	2006	Director of Research / Regional Clinic Director, First Steps for Kids, Inc.
	BA	2000	2002	2005	Professor/Administrator, The Chicago School of Professional Psychology
	MA	2000	n/a	2008	Behavior Analyst, Las Vegas
	BA	2000	withdrew	...	unknown
	BA	2000	2001	2004	Clinical Director, Imagine Behavioral Services
	BA	2001	2003	2006	CEO, The Abrite Children's Foundation
	BA	2001	2003	2007	Assistant Professor, Florida State University
	BA	2000	2005	2009	Owner/Consultant, SixFlex Training and Consulting
	BA	2001	2005	2010	Assistant Professor, Fresno State University
	BA	2001	2005	2006	Assistant Professor, Sacramento State
	BA	2001	2005	2008	Senior Research Director, Autism Research Group
	BA	2002	2006	2008	Assistant Professor, Cal. State, Fresno
	BA	2002	2005	2010	Founding Director, FitLearning
	BA	2002	2006	2008	Unknown
	BA	2002	2006	2008	Behavior Analyst, Advanced Child Behavior Solutions
	BA	2002	2006	2010	Clinical Director, Chrysalis
	BA	2003	2008	2011	Clinical Director, Precision Teaching Learning Center
	BA	2003	2005	...	Doctoral student, University of Nevada

	BA	2003	2005	2008	Associate Research Scientist, Treatment Research Institute
	BA	2002	2005	2011	Behavior Analyst, Applied Behavior Analysis, LLC
	MA	2004	n/a	2009	Assistant Professor, Cal State, LA
	BA	2004	withdrew	...	unknown
	BA	2004	withdrew	...	unknown
	BA	2004	2007	withdrew	unknown
	BA	2004	2008	2011	Clinical Director/Behavior Analyst, Abrite
	BA	2005	2007	2010	Global Capability Development Manager, BP
	BA	2005	2010	2012	Behavior Analyst, Washington
	BA	2005	2007	2012	Assistant Professor, Spalding University
	BA	2006	2009	2014	Post Doctoral Fellow & Academic Advisor, University of Nevada
	BA	2006	2009	2013	Assistant Professor, Florida Institute of Technology
	MA	2006	n/a	2013	Faculty Director, Behavior Analysis Online, University of N. Texas
	MA	2006	2008	2012	Director, Fit Learning
	BA	2007	2009	...	Doctoral student, University of Nevada
	BA	2007	2009	2013	Ethics Code Coordinator, Behavior Analyst Certification Board
	BA	2007	2014	...	Doctoral student, University of Nevada
	BA	2007	2010	...	Doctoral student, University of Nevada
	BA	2007	2010	2014	Post-Doctoral Fellow, Universidad de Guadalajara
	MA	2007	n/a	2012	Assistant Professor, Florida Institute of Technology
					Behavior Analyst/Implementation Specialist, Washoe County School District
	MA	2006	n/a	2014	
	BA	2007	2009	...	Doctoral student, University of Nevada
	BA	2007	2010	2013	Assistant Professor,

					University of New Brunswick
	BA	2007	2009	...	Doctoral student, University of Nevada
	MA	2006	2008	2013	Behavior Analyst, Chrysalis
	BA	2008	2010	2014	Behavior Analyst, Chrysalis
	BA	2008	2010	...	Doctoral student, University of Nevada
	MA	2008	2010	2013	Post-Doctoral Fellow, Behavior Analyst Certification Board
	BA	2008	2012	...	Doctoral student, University of Nevada
	BA	2009	2011	2013	Assistant Professor, Saint Cloud University
	MS	2011	n/a	...	Post-Doctoral Fellow, University of Vermont
	MA	2011	n/a	...	Doctoral student, University of Nevada
	BA	2009	2014	...	Doctoral student, University of Nevada
	BA	2010	2013	...	Doctoral student, University of Nevada
	BA	2011	2013	...	Doctoral student, University of Nevada
	BA	2011	2013	...	Doctoral student, University of Nevada
	BA	2009	2012	...	Doctoral student, University of Nevada
	BA	2012	2014	...	Doctoral student, University of Nevada
	BA	2010	...	...	Doctoral student, University of Nevada
	BA	2013	...	...	Doctoral student, University of Nevada
	MS	2011	n/a	...	Doctoral student, University of Nevada
	MS	2011	n/a	...	Doctoral student, University of Nevada
	BA	2012	...	...	Doctoral student, University of Nevada
	MA	2013	n/a	...	Doctoral student, University of Nevada
	BA	2011	2015	...	Doctoral student, University of Nevada
	BA	2013	...	...	Doctoral student, University of Nevada
	MS	2015	n/a	...	Doctoral student, University of Nevada
	MA	2014	n/a	...	Doctoral student, University of Nevada
	BA	2015	...	...	Doctoral student,

					University of Nevada
	BA	2015	...	...	Doctoral student, University of Nevada
	BA	2015	...	...	Doctoral student, University of Nevada
	MA	2013	n/a	...	Doctoral student, University of Nevada
	BA	2012	...	...	Doctoral student, University of Nevada
	BA	2011	...	...	Doctoral student, University of Nevada
	MA	2009	n/a	...	Doctoral student, University of Nevada

Part III C- Satellite Program in Behavior Analysis

The mission of the Satellite Programs in Behavior Analysis is to produce skilled behavior analysts who meet the needs of the community and contribute to science and practice of behavior analysis in a socially valid manner.

The objectives of the program are to: Preserve the accumulated knowledge of behavior science by imparting it to others; advance the science of behavior through the production of new knowledge; and contribute to the betterment of society by the application of this knowledge.

III.I Graduate Program Organization, Objectives and Effectiveness

The Satellite Programs detailed in this report are of two sorts. The first is pursuant to the Master of Arts in Psychology. This program is fully accredited by the *Association for Behavior Analysis International* (2000-05, 2005-10, 2010-15). The second is a non-degree program consisting of 18 credits of graduate course work in behavior analysis plus 4 credits (1000 hours) of supervised practical training. The curricula for both the master's degree program and the graduate course sequence are recognized as meeting the requirements specified by the *Behavior Analysts Certification Board*.

Master's Degree Program

The Satellite Master's curriculum is modeled after the on-site Master's curriculum, including the number of credits required for the degree. The curricula for these two programs differ in two ways, however. First, unlike the on-campus program, the Satellite program is conducted under plan B, whereby students do a mentored graduate research project in place of the thesis. Second, because the students in the Satellite Programs are fully employed in the human services sector throughout their training, they take half as many practicum credits as the on-campus students (i.e. 6 credits instead of 12). These credits are made up with additional didactic courses. Curriculum changes in the Satellite Master's Program are implemented in keeping with changes made to the Master's program on site. The Director of the Satellite Programs reviews syllabi proposed by instructors to assure comparability with the same courses taught on campus.

Delivery of Instruction

The Satellite programs are delivered to cohorts of students at particular locations. All students at a given location begin the program at the same time, take all of their courses together, and complete the program within a specified timeframe. By contract, each course is offered only once. Arrangements are made for students to make up missed or failed courses on an individual basis.

Two models of course delivery are represented in the programs delivered over the review period. The older model, in effect for the program sponsored by SEEK Education, involved face-to-face instruction delivered through intensive instructional sessions at the worksite, along with web-based supplementation. Instruction for the Easter Seals cohort is fully online. All of these online

courses feature a weekly lecture with slides, a weekly live chat, and weekly assessments of learning. For courses in both models of course delivery, a final proctored exam is required.

Curriculum

Credits	Course	
3	PSY 609	Principles in Behavior Analysis
3	PSY 607	Applied Behavior Analysis ¹
3	PSY 673	Radical Behaviorism
3	PSY 713	Behavioral and Systems Assessment
3	PSY 783	Behavioral Interventions
3	PSY 767	Behavior Management and Consultation
3	PSY 760	Special Topics: Verbal Behavior
3	PSY 695	Ethics in Psychology
3	PSY 723	Applied Research Methodology I
6	PSY 766	Behavior Analysis Practicum I
6	PSY 752	Graduate Research

Total Credits: 39

Research

All students complete individual graduate research projects under the guidance and supervision of faculty mentors. These projects take the form of literature reviews, meta-analyses, critical reviews, and experimental investigations. Experimental investigations require IRB approval.

Practical Training

All students in the Satellite Programs are fully employed in human service roles at their sponsoring agencies' sites throughout their training and their practical training takes place at these sites. Prior to the onset of the program sponsored by Easter Seals of Southern California (2014), practical training was conducted by way of two 3-credit courses. In these courses, students were organized into small teams with the responsibilities of developing, implementing, and assessing the outcomes of specific ABA or OBM projects conducted at their practicum sites. These activities were not part of the students' regular duties as employees at these sites. Instructor contact was limited to two on-site sessions, the first for purposes of project development at the beginning of the semester, the second for project presentations at the end of the semester. Between these two on-site sessions, regular reporting and feedback on projects is conducted on-line. This training was not designed to meet the requirements for field experience as specified by the *Behavior Analysis Certification Board*. Individual online supervision, as prescribed by the Behavior Analysis Certification Board, is ongoing for the students in the master's program sponsored by Easter Seals of Southern California.

¹ In subsequent deliveries of the Satellite Master's Program, the Applied Behavior Analysis course will be replaced with a 3-credit course on Experimental Analysis of Behavior. This change was made to meet newly established criteria for program accreditation by the *Association for Behavior Analysis International*.

Non-Degree Graduate Course Sequence

The non-degree graduate course sequence in behavior analysis is offered to students who have completed a master's degree in psychology or a related discipline in which the courses required for credentialing by the *Behavior Analyst Certification Board* were not included.

Curriculum

Credits	Course	
3	PSY 609	Principles in Behavior Analysis
3	PSY 713	Behavioral and Systems Assessment
3	PSY 783	Behavioral Interventions
3	PSY 760	Special Topics: Verbal Behavior
3	PSY 695	Ethics in Psychology
3	PSY 723	Applied Research Methodology I
4	PSY 766	Behavior Analysis Practicum I

Total Credits: 22

Practicum

Individual online practice supervision (1000 hours), as prescribed by the *Behavior Analysis Certification Board*, is ongoing for the students in the non-degree-course sequence sponsored by the King Faisal Specialist Hospital and Research Center.

Course Deliveries over the Review Period

Semester	Course #	Course Name	Instructor
Spring 2011	PSY 609	Principles in Behavior Analysis	Alavosious
Spring 2011	PSY 695	Ethics in Psychology	Ghezzi
Summer 2011	PSY 723	Applied Research Methodology I	Alavosious
Fall 2011	PSY 713	Behavioral and Systems Assessment	Williams
Spring 2012	PSY 783	Behavioral Interventions	Johnston
Spring 2012	PSY 766	Behavior Analysis Practicum I	Hayes
Summer 2012	PSY 607	Applied Behavior Analysis	Williams
Fall 2012	PSY 673	Radical Behaviorism	Hayes
Spring 2013	PSY 760	Special Topics: Verbal Behavior	Potter
Summer 2013	PSY 767	Behavior Mgmnt & Consultation	Alavosious
Fall 2013	PSY 766	Behavior Analysis Practicum I	Toney
Fall 2013	PSY 752	Graduate Research	Fryling/Wallace
Spring 2014	PSY 752	Graduate Research	Fryling/Wallace
Spring 2014	PSY 609	Principles in Behavior Analysis	Williams
Spring 2014	PSY 723	Applied Research Methodology I	Fryling

Spring 2014	PSY 695	Ethics in Psychology	Fryling
Fall 2014	PSY 713	Behavioral and Systems Assessment	Zonnefeldt
Fall 2014	PSY 783	Behavioral Interventions	Johnston/Johnston
Fall 2014	PSY 766	Behavior Analysis Practicum I	Fuller
Spring 2015	PSY 713	Behavioral and Systems Assessment	Zonnefeldt
Spring 2015	PSY 607	Applied Behavior Analysis	Hayes
Spring 2015	PSY 760	Special Topics: Verbal Behavior	Bonow
Spring 2015	PSY 766	Behavior Analysis Practicum I	Fuller
Summer 2015	PSY 695	Ethics in Psychology	Fryling
Summer 2015	PSY 673	Radical Behaviorism	Hayes
Summer 2015	PSY 766	Behavior Analysis Practicum I	Fuller
Fall 2015	PSY 783	Behavioral Interventions	Johnston/Johnston
Fall 2015	PSY 766	Behavior Analysis Practicum I	Peters
Fall 2015	PSY 765	Behavior Mgmt & Consultation	Morford
Fall 2015	PSY 766	Behavior Analysis Practicum I	Peters
Fall 2015	PSY 752	Graduate Research	Hayes
Fall 2015	PSY 609	Principles in Behavior Analysis	Toney

III.2 Graduate Students

Master's Degree Students

Admission Requirements

To be considered for admission to the Satellite Master's Program, students must submit official transcripts, GRE scores (verbal, quantitative), an application for admission to the Graduate School, a non-refundable application fee, an application for admission to the Satellite Program, a statement of purpose and two letters of recommendation. Students must have obtained a bachelor's degree with a minimum GPA of 2.75 to be admitted to the program in regular status. Students with GPAs between 2.3-2.74 may be considered for admission to a Prescribed Program. Students admitted to a Prescribed Program must complete 9 credits of specified coursework with a grade of "B" or better in order to continue in regular graduate standing in the program.

Applications, Acceptances, Retentions and Percent Retained: 2010-2015

Cohort	Year Admitted	Number Applied	Number Accepted	Number Retained	Percent Retained
SEEK Education, CA	2010-11	17	15	14	93.3%
Easter Seals Southern CA	2014	24	19	18 (to date)	94.7% (to date)

Student Quality

Cohort	Year Admitted	MEAN GRE (V)	MEAN GRE (Q)	MEAN GPA
SEEK Education, CA	2010-11	337	433	3.20
Easter Seals Southern CA	2014	146	141	2.87

Student Demographic Characteristics

SEEK Education serves the Chinese-speaking community in Southern California, among other groups. Approximately half of the students in the program sponsored by this agency are of Asian decent. Ten of the 14 retained students are female.

Easter Seals of Southern California serves the general population in this region. Approximately half of the students sponsored by this agency are Hispanic. 15 of the retained 19 are female.

Student Resources

All students participate in a Program Orientation session prior to the beginning of classes. These sessions are conducted face-to-face with the Director of the Satellite Programs. At these sessions the *Student Handbook* is distributed and other relevant information is discussed.

Graduate Non-Degree Students

Admissions Requirements

Students must have completed a master's degree in psychology or a related discipline from an accredited university.

Applications, Acceptances, Retentions and Percent Retained: 2010-2015

Cohort	Year Admitted	Number Applied	Number Accepted	Number Retained	Percent Retained
Easter Seals Southern CA	2014	22	14	11	61%
KFSHRC: CFAR I	2014	27	13	12 (to date)	92% (to date)
KFSHRC: CFAR II	2015	19	12	11 (to date)	91.6% (to date)

Student Demographics

Easter Seals of Southern California serves the general population in this region. Approximately two thirds of the students in this program are Hispanic. Eight of the retained 11 students are female.

The King Faisal Specialist Hospital and Research Center serves the citizens of Saudi Arabia. All but one student in both cohorts are Saudi Citizens. Five of the 22 students retained in cohorts 1 and 2 are female.

Student Resources

All students participate in a Program Orientation session prior to the beginning of classes. These sessions are conducted face-to-face with the Director of the Satellite Programs. At these sessions the *Student Handbook* is distributed and other relevant information is discussed. In addition, the Satellite Program Director travels to Riyadh at the beginning of each fall and spring semester for purposes of advising and management of the program.


III.3 Analysis

The Satellite Master's Program requirements have been developed to meet the standards for program accreditation by the Association for Behavior Analysis International. The Program has been accredited for 15 years. All students take the same courses in the same sequence. The Satellite Non-Degree Course Sequence requirements have been established to meet the requirements for individual credentialing by the Behavior Analyst Certification Board. No changes in either curriculum are anticipated at this time.

Student Outcomes

An important measure of student outcomes is their completion of the Behavior Analysis Certification Board exam. This exam can be taken only upon completion of particular degree requirements (e.g., bachelor's/master's), specified course work (e.g., 15/18 credits), and 750/1000 hours of supervised practice. The complete set of requirements for this credential has not been provided by UNR's Satellite Programs in the past. The first program with all of these requirements included is the program sponsored by Easter Seals, which is still ongoing. Nonetheless, the data shown below pertain to students completing some of these requirements.

SEEK Education Master's Degree Program (completed 5/14)


Student	Current Position	Areas of Practice	Setting	BCBA Obtained (As of 12/2015)
	Compassion Care and INFO Support	Religious Outreach	Ministry	-----
	Clinical Supervisors, Autism Spectrum Therapies	Autism/DD	Center Based	1-15-19447
	Program Supervisor,	Autism/DD	Center Based	1-15-19384

Pullenayegam	Autism Spectrum Therapies			
	Consultant	Autism/DD	In-Home	-----
	Consultant	Autism/DD	In-Home	1-15-18153
	Consultant	Autism/DD	In-Home	-----
	Consultant	Autism/DD	In-Home	1-14-17647
	Consultant	Autism/DD	In-Home	1-15-17984
	Special Education	Autism/DD	Public School District	-----
	N/A	N/A	N/A	1-15-17975

UNR did not provide practice supervision to this group of students.

Easter Seals Non-Degree Course Sequence (completed 5/15)

Student	Current Position	Areas of Practice	Setting	BCBA Obtained (As of 12/2015)
	N/A	N/A	N/A	-----
	Program Manager, Easter Seals Southern California	Autism/DD	In-Home	-----
	Speech-Language Pathologists, Easter Seals Southern California	Autism/DD	In-Home	-----
	Program Manager, Easter Seals Southern California	Autism/DD	In-Home	-----
	Therapy Supervisor at Easter Seals, Southern California	Autism/DD	In-Home	-----
	Program Manager, Easter Seals Southern California	Autism/DD	In-Home	-----
	Program Manager, Easter Seals Southern California	Autism/DD	In-Home	-----
	N/A	N/A	N/A	-----
	N/A	N/A	N/A	1-15-19923

Simon Shoushi	N/A	N/A	N/A	-----
	Autism Program Manager, Easter Seals Southern California	Autism/DD	In-Home	-----

The students in this group completed only the course work component of the requirements for Board Certification. We did not provide practice supervision and are not informed as to whether these students have completed this requirement such as to be eligible to take the exam.

A number of private entities have developed exam preparation programs, the completion of which turns out to be highly correlated with exam passage. Future service agreements for the delivery of our satellite programs will include exam preparation package

Part III D- Clinical Psychology

III.1 Graduate program organization, objectives and effectiveness

Overview of objectives and mission

The following program mission statement appears on the Clinical Program brochure, on web page, and Handbook:

The clinical psychology program at the University of Nevada, Reno has been accredited by the American Psychological Association since 1972 and is a charter member of the Academy of Clinical Science. We take an integrative clinical science approach to training. We seek to train doctoral level clinical scientists who have a thorough grounding in research and scholarly activities, can develop and use scientific knowledge, are skilled in using their critical thinking and analytic tools in problem formulation and solution generation. This includes the development of a full range of professional competencies, including applied skills in areas such as healthcare administration and policy, integrated behavioral health and traditional mental health settings, program development and evaluation, among others.

Our objectives are that scholars, faculty and students alike, make significant contributions in one or more of our existing areas of strength, *regardless of the setting in which they occur*. Our program is a broadly focused on applying scientifically valid psychological principles, processes, and methods across various levels of analysis (individuals, couples, families, systems, and organizations); across a full range of settings in health care, mental health care, and substance use and abuse care; and across the wide range of roles afforded by these settings, including treatment, supervision, management, program design and evaluation, dissemination, policy, and economic development, sustainability, and accountability. Our main areas of strength represent faculty interests and areas of research and can be loosely categorized in two inter-related categories:

Academic clinical psychology from a behavioral/cognitive-behavioral perspective

- Basic behavioral research
- Clinical geropsychology
- Functional contextualism
- Mental health treatment development
- Mindfulness and training
- Philosophy of science
- Radical behaviorism
- Reactions to adversity and trauma
- Research methodology
- Third-wave treatment approaches (ACT, FAP, DBT)

Clinical psychology as an applied discipline within larger health care systems

- Applied behavioral research
- Behavioral health policy and research
- Behavioral medicine
- Health behavior
- Health care delivery systems
- Integrated health care
- Treatment outcome research
- Program development
- Program evaluation and quality improvement
- Technology transfer

The clinical psychology program philosophy and model of training is oriented toward the training of students in general principles of psychology as they relate to theoretical and applied activities. For example, the program does not have specific tracks (e.g., a child track or an adult track). A goal of the program is that graduates will think of themselves as psychologists first, clinical psychologists second and clinical psychologists with areas of specialization third. As part of this emphasis, students are exposed to a wide variety of populations, settings, and techniques in their training.

The program follows a clinical scientist model, and thus a scientific approach to all aspects of training is strongly emphasized. Even for those students who have primarily applied interests, there is a growing emphasis on psychologists becoming designers and evaluators of treatment programs rather than simply direct service providers. Where possible, students receive practicum training in the context of ongoing clinical research trials so that assessment, evaluation, and theory-driven treatment innovation is modeled.

The basic research training unit is the faculty research lab. Students are encouraged to select one or more faculty labs to join during the first year with the expectation that they will eventually spend their time working with a primary faculty mentor, though occasionally students will maintain their roles in two labs throughout their career. The Clinical Program at the University of Nevada is distinguished by the fact that it is a philosophically coherent program. While this does not mean that the faculty are all paradigmatically identical, they do generally share scientific and training values. Because faculty all value critical thinking and assume that students will evolve intellectually and with respect to their research interests, students are expected to identify and refine their research interests over time.

In that development, the program allows students to explore labs easily and, through mutual agreement, select the lab in which they will eventually do most, if not all, of their subsequent research. In most cases, the faculty member with whom a student decides to do research is generally selected as that student's advisor. Within labs, the program follows a "junior colleague" model and thus involves students at every level of the research process. All of the clinical faculty conduct applied, as well as more basic, research on various clinical populations.

Though there is variation among labs, several are run as vertical teams in which incoming students learn pragmatic fundamentals while collaborating with more senior students until they identify research projects of their own, all under the supervision of the faculty. As students develop, the majority present at national conferences and most all publish in collaboration with faculty and even other students.

As a training program, we are committed to providing the best learning atmosphere, climate, and setting for our graduate students. We have a holistic view of our students, and thus are committed to developing the full potential of each individual as a person, as a student and as a psychologist.

A positive atmosphere is generated by treating students as junior colleagues, by initiating dialogue and discussion, by recognizing idiosyncratic styles and direction, by giving

considerable responsibility and freedom to students, by creating trust and openness, and by being available and accessible to students.

Relation of the graduate program to the needs of the state, nation and other programs and significant changes to the program organization or objectives

The Clinical Program at the University of Nevada, Reno (UNR) is a component of the Psychology Department of the College of Liberal Arts (CLA). UNR is fully accredited by the Northwest Association of Schools and Colleges.

The program is a center for scholarship and learning in the discipline of clinical psychology, with responsibilities that extended to the citizens of our region, state, nation, and world. The clinical program seeks not only to teach what is known, but more importantly to develop knowledge, to apply that knowledge to human problems, and to instill the methods of creative, critical, scientific inquiry in our students. In all of its actions, the clinical program seeks to create a safe and supportive learning environment that is respectful of diversity, avoids prejudice of all kinds, maintains an attitude of open and free inquiry, builds a sense of intellectual community and mutual respect, and that takes seriously the social responsibilities that flow from participation in a public, land grant institution. On the state level this has included contributions to the State Licensing Board, Legislative Task Forces, an initiative initiated by the Office of the Governor to address the shortfall in mental health services in Nevada, and serving as one of the only provider of sliding scale mental health services for northern Nevada via our training clinic (the Psychological Services Center (PSC), serving as a key provider for the Nevada Victims of Crime Program, providing well trained behavioral healthcare providers for social service and healthcare agencies in the Reno/Carson City area through our externship program, providing training to social service and healthcare professionals across Nevada, as well as other roles..

The PSC houses both general and specialty training teams, all supervised by clinical faculty, including teams focused on the treatment of anxiety, depression, couple and family problems, substance abuse, and interpersonal difficulties in addition to the treatment of special populations including chronically suicidal adults, persons with neurocognitive disorders, victims of sexual abuse victims (children and adults), victims of domestic violence, victims of elder abuse, neglect or financial exploitation, and children with behavioral problems , In addition to the primary function of providing a venue for clinical training, another significant function of the PSC is to provide outreach to communities in Northern Nevada. Currently, the PSC is one of the only sliding-scale clinics serving the greater Reno community. The PSC serves about 200 people from the community annually, providing more than 2000 low cost clinical hours. Reno and the surrounding areas have been designated a Mental Health Professional Shortage Area, with access to professional mental health services among the lowest in the nation. The provision of low-cost evidence based behavioral healthcare is critical as Nevada has some of the highest prevalence rates of a number of mental health problems, including anxiety disorders, major depressive disorder, substance abuse, and suicide. The PSC also functions as a treatment and referral resource for UNR students (excluding those in the Clinical Psychology Department) and as a research field site for students and faculty.

The Clinical Psychology Program contributes to the Department's and University's goals in

several ways. First, the faculty and students add to the knowledge base of the science in theoretical, philosophical, basic, and applied scientific contributions by presentations at regional, national and international conferences, as well as publications in books and journals. These activities establish and support the values of critical thinking and scientific inquiry in our students. Second, students collaborate with faculty to initiate research grants to generate support for research activities. Third, our program provides direct clinical services to persons in Northern Nevada, as alluded to above. This activity requires our students to apply the principles they learn and manifest the program values in ways that directly benefit the community in which we live. All students are members of research laboratories, clinical supervision teams, and providers of direct services to clinical populations. These activities consistently maintain the link between generation and application of knowledge as our students move through and beyond the program.

Graduate degrees, majors, options, certificates and interdisciplinary programs contributing to the graduate program.

The Clinical Psychology Program is a doctoral degree granting program. We do not offer a terminal master's degree except under rare extenuating circumstances. All students must complete a master's level research project and a dissertation project. A master's degree is not required as part of the Ph.D. program. However, the completion of a master's thesis or a predoctoral master's equivalent project is required of all students.

Most of the clinical course work is restricted to clinical doctoral students. However, some of the general seminars and research methodology courses are open to doctoral level students outside of our program. The following courses are offered by clinical faculty and taken by doctoral students outside the clinical program as well:

- | | |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PSY 707 | Intermediate Statistics II- Covers theory, research design issues and procedural skills necessary to use linear regression based analyses including regression inference, indicator variables, regression assumptions and diagnostics, categorical outcomes, path analysis, missing data, and basic multilevel modeling. This course is required for students in the Interdisciplinary Social Psychology Ph.D. Program and also has been taken by graduate students from cognitive and brain science, behavior analysis, the school of education, and biology. |
| PSY 723 | Applied Research Methodology I - Theory and philosophy of research designs in applied psychology, covering single-case designs in the applied environment, theory construction and philosophy of science issues. This course is also taken by Behavior Analysis students as well as those from the Interdisciplinary Social Psychology Ph.D. Program. |
| PSY 724 | Applied Research Methodology II - Theory and philosophy of research designs in applied psychology, covering heuristics, group designs, quasi-experimental designs, psychometric theory, classical test construction, reliability, validity, and meta-analysis. This course is also taken by |

Behavior Analysis students as well as those from the Interdisciplinary Social Psychology Ph.D. Program.

PSY 760/761 Special Topics in Behavior Analysis & Contemporary Issues in Psychology -General seminars including: Evolution, Cognition, behavior and culture in Emotion; Special topics in applied statistics; Psychotherapy outcome research design; Observational research design are taught by clinical faculty and open to students outside the program.

PSY 7xx Affective/cognitive basis for behavior course

Clinical students must take one 3-credit, 700-level course in the area of affective/cognitive basis for behavior course. This is covered in the clinical program via the Special Topics in Behavior Analysis course (PSY 760) on Evolution, Cognition, Behavior & Culture in Emotion. This course is also taken by students from the Interdisciplinary Social Psychology Ph.D. Program.

However, students may check with the Director or his/her delegate on other course offerings meet this requirement in a given semester. Examples that fill the requirement include Theories of Learning (PSY 731), Behavior Analysis of Language and Cognition (PSY 747), Attitudes: Structures, Function and Change (SOC 722).

Following requirements from our professional accrediting body, the American Psychological Association (APA), for accreditation, the clinical program requires a variety of courses outside clinical core courses. These are often offered from other programs in the department or related programs outside of the department and include:

PSY 608 History of Psychology (Sometimes taught by a clinical faculty member)

PSY 7xx Biologically-oriented course

Clinical students must take one 3-credit, 700-level course in the area of affective/cognitive basis for behavior course. This is covered in the clinical program via the Special Topics in Behavior Analysis course (PSY 760) on Evolution, Cognition, Behavior & Culture in Emotion. This course is also taken by students from the Interdisciplinary Social Psychology Ph.D. Program.

PSY 7xx Affective/cognitive basis for behavior course

As noted above, this is covered in the clinical program via the course Special Topics in Behavior Analysis course (PSY 760) on Evolution, Cognition, Behavior & Culture in Emotion. However, students may check

with the Director or his/her delegate on other course offerings meet this requirement in a given semester. Examples that fill the requirement include Theories of Learning (PSY 731), Behavior Analysis of Language and Cognition (PSY 747), Attitudes: Structures, Function and Change (SOC 722).

PSY/SPSY/SOC 7xx Social basis for behavior

Currently this requirement may be fulfilled by taking Advanced Social Psychology I (PDSY 739), Contemporary Issues in Psychology (PSY 761) on Social Influence, or Social Psychology and Culture (SOC 732).

In addition, the two following classes (one required, one recommended) are a part of our established statistical training sequence. Intermediate Statistics I (PSY 706) is usually taught by a member of the Psych Department outside of the Clinical Program or a member of the Social Psychology Interdisciplinary Ph.D. Program.

PSY 706	Intermediate Statistics I (Required) – Addresses basic parametric and nonparametric approaches to data analysis including ANOVA and ANCOVA designs
SOC 731	Advanced Design and Data Analysis (optional)

Summary of the program's advisement policies and procedures for resolution of any student/advisor conflicts.

Advising and Conflict Resolution in Clinical Program

Advising is shared across the eight faculty members (average number of Ph.D. students per faculty member = 4.12, SD = 2.42). The size and graduate advising load has varied since the last report in 2008. The economic downturn that began in 2008 had an adverse effect on university, federal, as well as state and local funding sources for student support that affected our ability to support our students in the Ph.D. program. As a consequence of these fluctuations, we reduced the number of students we admitted during two admissions cycles as we could not ensure that we would be able to provide funding for a full-sized incoming class in addition to our current students. Specifically, we admitted a class of three in 2009 and did not admit a class in 2013.

When students enter the program they select one of the core clinical faculty to serve as their academic advisor. Students and advisors work out a tentative program of study during the first semester of students' tenure in the program. The academic advisor also serves as the liaison between the Clinical Training Committee and the student during the annual evaluation and provides the student with specific feedback from the Committee. For students who completed graduate level coursework at another university prior to entering our program the advisor provides guidance on petitioning the Clinical Training Committee for transferring graduate course credit. If at any time a student needs counseling, tutoring, etc., the academic advisor is the

official person to help him or her make the appropriate arrangements. Students may select a new advisor at any time without risk of losing financial support. The role of advisor is normally assumed by the student's research supervisor. The student may approach faculty other than their academic advisor to discuss their program of study and any problems they may be experiencing.

Advising is conducted within individual sessions with a student's advisor. The curriculum is relatively fixed except for electives. The standard curriculum is described in the program handbook. Breadth electives (which derived from the elimination of the foreign language requirement by the graduate school many years ago) are broadly construed by the program. A student can request electives from outside of the department. Approval of a request requires endorsement from the advisor and a justification for how the course will contribute to a student's overall career plan. Computer programming and courses in the medical school or Department of Public Health could easily count.

The adequacy of advising is checked via the annual review of each student's progress towards completion that is conducted by the entire CTC. At that time, each faculty member who has had contact with a student presents feedback to the faculty advisor who relays that information back to the student in written form. The DCT is available for consultation if the student does not understand the feedback.

Students can and do meet one-on-one with the DCT to resolve minor issues in the program. Since it is intentionally simple to change advisors in our program, when difficulties occur between students and advisors, or more commonly interests shift, changing advisors happens easily.

The program handbook is published on the Clinical Program's University website and SharePoint® site and available for downloading. Historically, psychology graduate students have been involved in the Graduate Student Association.

In the case where students feel more formal grievance procedures are needed, the SharePoint® site maintains links to University grievance procedures, the University Office of Student Judicial, Advocacy, and Mediation Services, and the ombudsman's office. In addition, the program follows the grievance mechanisms specified by APA.

Historical Trends in Advisement

Average time to completion for the 42 Ph.D. students who graduated between December 2008 to the present (October 2015) was 7.59 (SD= 1.79) years with the median and mode both equal 7.0 (N=17). This compares to the latest figures from the APA Office of Accreditation indicates the national average for accredited programs is 6.43 years (range = 4 to 9.8 years; <http://www.apa.org/ed/accreditation/about/research/2014-doctoral-summary.pdf>). The most recent time to completion data indicate improvement from the previous report (Average = 8.1; median and mode = 8.0), with the trend for newer students to graduate more quickly accelerating since last report (previous $r = -.56$, current $r = -.65$).

The continuing trend in the improvement in completion rate for recently admitted cohorts

suggests that the program is more effectively providing resources to facilitate student progress than it has in the past. However, there is an upside to longer completion times. Several of our graduates have been hired directly into academic faculty positions without spending time in postdocs due to the fact that their CVs were competitive at completion of the doctorate.

The program continues to encourage timely completion of the program, and we are in the process of reorganizing our class sequence and further defining program expectations for acceptable progress in order to accelerate time to program completion. Our accrediting organization, the American Psychological Association requires ongoing programmatic self-study and self-improvement (APA Implementing Regulation (IR) C-32). As such, program related data are systematically and formally reviewed on an annual basis by the Clinical Psychology faculty as in order to determine how we can improve the program to ensure we are meeting our program objectives. During this review we examine data from a proximal data instrument that includes progress through the program and other related metrics aggregated over the whole program, by cohort, and individually. Based on this review, we have streamlined some established processes to address areas for improvement identified from reviewing this data particularly in the last two years.

For example, one area for improvement was based on data that indicated that a significant minority of our students were not completing comprehensive exams or their pre-dissertation research project in a timely manner. Further inquiries (polling students and faculty) indicated there were a couple of structural issues that contributed to the lack of timely progress. One included no formalized expectation for when comprehensive exams were due; an issue that extended to completion of the steps for the completion of the required pre-dissertation research project. Based on feedback from both students and faculty, we formalized the expectations for when these requirements are due for our incoming students:

Year 1

- 2nd semester - 1st comp done - write a comprehensive review of existing research literature within topic area.
- End 2nd semester/ Summer first year– Have a pre-proposal done for pre-dissertation research project and second reader identified

Year 2

- Pre-dissertation research project approved - data collection begun by end of Fall semester
- 2nd comp completed - write a comprehensive review of existing research literature outside topic area (broad/general)

Year 3

- Pre-dissertation research project completed, data analyzed, and write up approved by readers
- 3rd comp completed

In regards to the pre-dissertation project, data review and subsequent inquiry indicated that scheduling the research methods sequence in the first year and the statistics sequence in the second year revealed concerns that students would not be academically prepared to design and analyze their data until the end of their second year. Therefore, in Fall 2015 we moved our

statistics sequence to the first year so that the research method and statistics sequences occur in parallel. We are hopeful that this change will allow for more synergy between the statistics and research methods classes as well as boost pre-graduation publication rates of our students in the coming years, making them more competitive on the academic job market.

Student governance and participation in the program and in curriculum development in the Clinical program.

The program emphasizes that the students and faculty are the program. A student representative is selected by the students to participate as a member of the CTC except when personnel issues are being discussed. The CTC makes all program decisions, and thus students have direct input into all those discussions. In addition, an open monthly meeting with the students and DCT is a tradition that has existed for over a quarter of a century and allows for open discussions of any aspect of the program.

Clinical Psychology Program Curriculum: Required Coursework and Other Major Requirements

The clinical core courses and associated practica are designed to provide a theoretical and empirical knowledge base to inform the applied and clinical research training the students receive. Courses mounted within the Clinical Psychology Program are marked with an asterisk below.

Core Didactic Clinical Courses

A key focus in this training is diagnosing or defining problems through psychological assessment and measurement and formulating and implementing intervention strategies.

Students are exposed to theories and methods of assessment and diagnosis throughout the clinical core coursework. The required assessment course covers theoretical and practical considerations in case conceptualization, the measurement of behavior, treatment planning, and evaluation. Methods of assessment covered in the assessment class include interviewing, direct observation, empirically derived approaches to intellectual and personality assessment, and functional analysis. Students also receive instruction in heuristic errors in clinical judgment, considerations in the evaluation of the treatment utility of assessment, and methodological issues associated with actuarial prediction. The required core didactic clinical courses include the following:

PSY 771*	Clinical Psychology Ethics and Professional Issues (offered annually)
PSY 756*	Introduction to Clinical Assessment (offered annually)
PSY 757*	Introduction to Clinical Intervention (offered annually)
PSY 758*	Problems and Intervention with Adults (offered annually)
PSY 761*	Contemporary Issues in Psychology: Lifespan Development (offered bi-annually)

Note- We are in the process of redesigning our clinical didactics sequence to integrate clinical

skills training with practicum experience and related topic matter. This semester (Fall 2015) we will formally submit these changes to UNR's University Courses And Curricula Committee. The proposed will be as follows:

PSY 757*	Introduction to Clinical Intervention (offered annually) <i>Interventions/ basic techniques, Psychopathology, Learning principles, Ethics</i>
PSY 756*	Introduction to Clinical Assessment: 1st year Clinical Practicum -1st Semester (offered annually) <i>Interviewing, Intakes reports, IQ testing, Functional assessment</i>
PSY 758*	Problems and Interventions with Adults: Clinical Skills 2 (offered annually) <i>Interventions/Empirically Supported Treatments, Case conceptualization, Ethics</i>
PSY 771*	Clinical Psychology Ethics and Professional Issues: 1st year Clinical Practicum - 2nd Semester (offered annually) <i>Interviewing, Intakes reports, Personality testing, Integrated Report writing</i>
TBD*	Clinical Skills 3 (offered annually) <i>Case conceptualization & treatment planning, Supervision skills, Consultation skills, Ethics</i>
PSY 761*	Contemporary Issues in Psychology: Lifespan Development (offered bi-annually)

Clinical Practica

Clinical practica are designed to be integrated with course offerings. In the first year students are introduced to clinical work through didactic training, direct observation, role-playing, and through direct clinical responsibilities by serving as primary or co-therapists. In the second and third years, students complete a practicum sequence (PSY 714, PSY 715, PSY 716, and PSY 717) within the Psychological Services Center (PSC), a community oriented clinic housed in the Psychology Department. During the practicum sequence students are exposed to a broad range of problems, populations, and modes of intervention including individual, marital, and family therapy. Students carry an average of three clients per semester. Over the course of a semester students are expected to accumulate approximately 40 hours of client contact. Training and service provision at the PSC is provided 12 months a year.

The practicum sequence is graduated such that first-year students sit on vertically integrated (with students from all years in the program) supervision teams that are supervised by our core clinical faculty. First-year students sit on the teams generally with no expectation that they will see clients, but rather to integrate the material that they learn in their ethics and intervention courses. The information covered in methods of assessment, intervention involving empirically supported therapies, and functional analysis come to life for the first year students in the direct observation of cases and supervision. Students also receive instruction in heuristic errors in clinical judgment, considerations in the evaluation of the treatment utility of assessment, and methodological issues associated with actuarial prediction. Occasionally some second-semester,

first-year students who have prior clinical training begin to see clients, although that is the exception rather than the norm. In the second and third years, students sign up for their four-course practicum sequence where they are required to attend at least three different supervision teams. Advanced students may continue on teams and may either see more complex cases and/or participate in the supervision process as peer supervisors. After successful completion of the clinical practicum sequence, students have the opportunity to participate in a variety of additional clinical and/or research externships that they may pursue in the community.

Clinic teams are typically organized to represent varied levels of training and experience. Typically, each team includes a faculty member and several graduate students at varying stages of experience. The rationale for a team approach is twofold: First, to encourage successive levels of responsibility as students work together in a cooperative setting; and second, for trainees to be exposed to, and benefit from, a diversity of clinical experience. Teams may be organized around a theoretical approach (e.g., a behavioral team), a specific population (e.g., a family/couples team, a child team), or a specific theme or issue (such as health psychology or assessment). Teams meet weekly throughout the academic year. The structure and content of the teams' operation vary considerably, according to the style and interests of team focus, supervisors, and team members. Customarily students in the second year and above are expected to carry three cases on each team on which they participate. All students are required to participate on a minimum of three teams during their tenure in the program. Because the PSC operates beyond the duration of the academic year, a summer practicum is part of regular clinic functioning. Once a PSC practicum has commenced, and particularly if a therapist is involved with cases of an ongoing nature, it is expected that he or she will participate in the summer practicum. In general, teams are considered to be an 8-10 hour/week involvement (including client contact, supervision, note writing, and session preparation), equivalent to three credits per semester for students. For faculty, supervision typically entails two hours/week group supervisions plus one to two hours a week individual supervision meetings plus *ad hoc* case management on a 52-week basis.

PSY 714*	Clinical Practicum I (offered annually)
PSY 715*	Clinical Practicum II (offered annually)
PSY 716*	Supervised Clinical Practicum III (offered annually)
PSY 717*	Clinical Practicum IV (offered annually)
PSY 772*	Advanced Supervision and Clinical Practicum (offered annually)

As part of the PSY 714 through PSY 717 course sequence, students meet once a week with at least one supervision team headed by a clinical faculty member. During team sessions cases are presented, clinical alternatives are discussed, didactic instruction occurs, ethical and other issues are discussed. Students also observe other team members' clinical work. During the course of their practicum training students are required to participate on a minimum of three different supervision teams.

During their third and/or fourth year, students complete a 20 hour per week externship at either a community agency, the university counseling center, or in an applied clinical or research setting often associated with grant supported applied research or treatment delivery.

PSY 773* Clinical Psychology Half-Time Externship

Finally, the program requires each student to complete a block-time approximately 2000 hour, APA-accredited predoctoral internship. The internship constitutes the final phase of the student's training, and should follow or coincide with completion of the doctoral dissertation. Under unusual circumstances, students may propose an alternative to the APA accredited internship.

PSY 774* Clinical Psychology Full-Time Internship

Research Methods and Statistics

The scientific, methodological and theoretical foundations of practice in clinical psychology are addressed in our statistics and research design courses:

PSY 723*	Applied Research Methodology I (offered annually)
PSY 724*	Applied Research Methodology II (offered annually)
PSY 706	Intermediate Statistics I (offered annually)
PSY 707*	Intermediate Statistics II (offered annually)
PSY 7xx*	Additional methodology class(es) (<i>optional</i> –e.g., observational coding, psychotherapy outcome, Behavioral and Systems Assessment (PSY 713)- offered every 2-3 years)
PSY 7xx	Additional statistics class(es) (<i>optional</i> – e.g., Advanced Design and Data Analysis (SOC 731), Structural Equation Modeling, Mixed Modeling - offered bi-annually)

Breadth Courses / Required electives

Students are required to complete coursework to increase the breadth of their training in basic psychology. Required courses cover the biological, social, and affective/cognitive bases of behavior, and well as the history of psychology.

Breadth Courses in Clinical Area

PSY 750*	Seminar in Clinical Psychology (offered annually)
PSY 751*	Seminar in Clinical Psychology (optional – not required- offered annually)

Breadth Courses Outside Clinical Specialty (these classes are typically offered every 2-3 years across programs/departments)

PSY 608	History of Psychology
PSY 7xx	Biological aspects of behavior (<i>one required</i>)
	PSY 729 Human Memory
	PSY 603 Physiological Psychology
	PSY 720S Seminar in Sensation and Perception
	PSY 721 Advanced Psychophysiology
PSY 7xx	Cognition/Affect (<i>one required</i>)
	PSY 761* Evolution, Cognition, Behavior & Culture in Emotion

	PSY 731 Theories of Learning
	PSY 747 Behavior Analysis of Language and Cognition
	SOC 722 Attitudes: Structures, Function and Change
PSY 7xx	Social bases of behavior (<i>one required</i>)
	PSY 739 Advanced Social Psychology I
	PSY 761 Contemporary Issues in Psychology: Social Influence
	SOC 732 Social Psychology and Culture
PSY 7xx*	General Breadth Requirement: 2 electives in basic psychology or related field, 3 credits each, normally 700 level

Classes within clinical program:

PSY 713 Behavioral and Systems Assessment

PSY 750 Seminar in Clinical Psychology: Behavioral Medicine

PSY 760 Special Topics in Behavior Analysis: Integrated Care

Existing classes w/in psychology department

PSY 673 - Radical Behaviorism

PSY 713 - Behavioral and Systems Assessment

PSY 747 - Behavior Analysis of Language Cognition

PSY 769 - Behavioral Systems Analysis

PSY 783 - Behavioral Interventions

Public Health Classes

CHS 753 - Health Informatics

CHS 701 - Social and Behavioral Dimensions of Health

CHS 755 - Health Policy and Administration

CHS 706 - Social Epidemiology

CHS 705 - Theoretical Foundations of Health Promotion

Cultural Diversity

Students are required to take a course on issues of cultural and individual diversity. This course is designed to expand students' knowledge of individual and cultural diversity. Because our program is behavioral, the program continually emphasizes the importance of context in order to more fully understand the meaning and function of behavior. This paradigmatic view makes the appreciation of cultural factors and the individual's history central to properly understanding behavior and behavior change. While several of the clinical core courses address issues of diversity, the required course explicitly addresses issues of cultural variation, gender, sexual orientation, ethnicity, and physical disability, among other topics is:

PSY 743*	Cultural Diversity OR (<i>offered bi-annually</i>)
SOC 732	Social Psychology and Culture (<i>offered bi-annually</i>)

Comprehensive Examinations

Three comps are completed, each exploring a different interest area; (1) Assessment/Evaluation, (2) Psychopathology/ Life Crises and Problems, (3) Psychotherapy/ Mental Health Services

Delivery, (4) Developmental/ Personality, or (5) Wildcard – a topic of the student’s choice, which does not fit neatly into one of the above categories (examples: Methodological Issues, Topics in Philosophy of Science related to psychology). No more than one comprehensive examination may have a “wildcard” focus. The interest areas selected should be significantly different from each other. The intent is to broaden and deepen students’ areas of knowledge and expertise.

PSY 795* Comprehensive Examination

Master’s Level Research Study, Dissertation

PSY 752* Graduate Research **OR**
 PSY 797* Thesis
 PSY 799* Dissertation

Attitudes essential for life-long learning, scholarly inquiry and professional problem solving pervade the learning environment. The process by which professional behavioral repertoires are developed includes direct instruction, modeling of the criterion behaviors by faculty members, and reinforcement of the criterion behaviors during multiple opportunities. Our curriculum and professional milieu are designed to provide students with multiple opportunities to engage in the criterion behaviors of scholarly inquiry and professional problem solving. Over the course of their training, these behaviors are reinforced by the natural consequences one encounters in a scientific community and at the completion of their training are integral parts of a student’s functioning as a scientist-practitioner.

Clinical Curriculum Development

Informal Program Evaluation

The Clinical Training Committee, composed of all clinical faculty and a student representative, meets at least two times per month in order to review program goals and objectives, discuss program resources and needs, and address any concerns regarding the functioning of the clinical program. At these regular meetings the curriculum is reviewed and updated as needed. Factors influencing course additions or deletions include review of APA requirements, new faculty interests, and student feedback.

The course offerings for the next year are evaluated to be sure they are current and allow students at various phases of the program to be able to take all the courses required to graduate in a timely manner. These meetings of the Clinical Training Committee provide a forum for continuous evaluation of and discussion of program issues. Further, the entire program meets once each month. One of the functions of the monthly program meeting is to provide a forum for concerns and ideas from either students or faculty to be opened to general discussion. This procedure has been helpful in solving minor problems before they become larger concerns.

Formal Program Evaluation

A comprehensive formal program review was last conducted in 2013 (an APA accreditation visit resulting in full accreditation until 2018). The Clinical Training Committee reviews program data annually as noted above.

Administrative structure of the graduate program/relation to department structure/resources are used to administer the graduate program/Resource allocation

The clinical psychology program consists of eight full-time faculty. The faculty of the whole makes up the Clinical Training Committee (CTC). There is a Director of Clinical Training (DCT). The CTC reviews all issues related to curriculum, student progress, and program decisions. The DCT serves on the department executive committee, which is composed of area directors, the chair, and the associate chair. The DCT has a $\frac{3}{4}$ time administrative assistance. One of the faculty also serves as the Director of the Psychological Services Clinic. The clinic director's role is to oversee the functioning of our training clinic and to assure regulatory compliance. There is one clinic teaching assistant to assist the clinic director as well as a half-time administrative assistant for the PSC director who helps with client pre-screening, billing, and scheduling. Both the DCT and the clinic director receive a small stipend and one course teaching release per year.

Financial support for training and educational activities

The University provides several forms of support for both faculty and graduate students, including GA support (see next section). Funds are available to all faculty from the College of Liberal Arts to attend one conference per year, though there is some variability in the availability of funds. The department chair also makes some additional funds available for discretionary use by faculty as the budget permits. Students are eligible to apply for travel funds through the Graduate Student Association.

Clinical Program Student Learning Outcomes: Goals, Objectives & Competencies

The process for evaluating specific program outcomes is largely implicit within the program objectives associated with each of the program goals. Details regarding performance criteria and associated assessment procedures are described below.

Goal #1: Graduates will demonstrate a thorough grounding in research, scholarly activities and skills to develop and utilize scientific knowledge

Objectives for Goal #1:

- A. Students value scientific evidence as a primary way of learning.
- B. Students will participate in research throughout their training.
- C. Students will demonstrate scholarship in their activities in the program
- D. Students will become competent in the basic tools of clinical science and reasoning

Competencies Expected for these Objectives:

- A. Students will be able to design and implement research

- B. Students will be able to critique the design of experiments
- C. Students will be able to participate in supervision making use of materials learned in didactic courses and supplemental reading and training
- D. Students will be able to synthesize knowledge into asking new questions

How Outcomes are Measured and Minimum Thresholds for Achievement for these Objectives/Competencies:

- A. Students will pass with a grade of “B” or better in two graduate methodology courses (PSY 723, PSY 724) and graduate two statistics courses (PSY 706, PSY 707)
- B. Students will participate in research throughout their training and complete at least two empirical research projects: a master’s project or pre-doctoral level project and a dissertation project during the course of their training. The minimum threshold for achievement (MTA) will be the unanimous committee judgments that the projects pass.
- C. Students will complete three comprehensive examination papers (at least one of which is a grant application) to facilitate development of scholarly interests and broaden students’ areas of knowledge and expertise. The MTA is that all readers have to rate the exams as 3 or higher on a 5-point scale.
- D. Students will attend weekly research meetings under the direction of a faculty member during which research will be discussed, planned, evaluated, and prepared for presentation at professional conferences and publication. The MTA will be participation at a level appropriate for the student’s level of training. The MTA is an acceptable rating following the annual evaluation of the student by the CTC.
- E. Students will participate on clinical supervision teams during which relevant published research or the application of psychological principles will be discussed. MTA will be a grade of “B: or higher in all practicums courses.
- F. Students will submit at least one substantial grant application. The MTA will be a passing rating by the faculty committee appointed to read the proposal.
- G. Students will complete our curriculum thereby providing them with broad and general as well as in-depth knowledge of the subject matter. Completion of the curriculum is assessed by the doctoral committee and DCT and documented via their signing the completed program of study.
- H. The primary measure is by evaluation of our student’s comprehensive examinations. We have a system of competency-focused tasks in our comprehensive exam system. In this system, all students must write an original research grant, which is then evaluated by a faculty review committee. A key focus of the evaluation of any submitted grant is an evaluation of whether the student has shown on the basis of the existing literature that a new question needs to be asked, and has provided an empirical way to do so. Other comprehensive examination topics are also relevant since students write integrative review papers for the other two components of their comprehensive exams, and by their nature these papers involve synthesizing and extending knowledge.
- I. A second secondary measure of this competency is the successful completion of required research projects and completion of classes with a B or better grade. Theses, pre-doctoral projects, dissertations, and many class projects and papers assess the ability of students to ask new questions based on their synthesis of the existing literature.

Goal #2: Graduates will have a well-developed repertoire of professional competencies and applied skills based on empirical supported treatments and principle-based knowledge for entry into the practice of professional psychology

Objectives for Goal #2:

- A. Students will be proficient at psychological assessment and case conceptualization.
- B. Students will be proficient in knowledge of ethical principles of professional psychology.
- C. Students will be proficient in principle-based treatments
- D. Students will be prepared for and complete Association of Psychology Postdoctoral and Internship Center (APPIC) accredited internships

Competencies Expected for these Objectives:

- A. Students will be able to select, administer, score and interpret, validated standardized tests that are appropriate for the target population or client
- B. Students will be able to interpret and understand classic psychometric properties of assessment procedures and instruments
- C. Students will recognize and consult on ethical issues that occur during the course of therapy
- D. Students will demonstrate the competent design and delivery of principle based treatments including thinking critically about how a therapist might need to recognize individual difference variables that might affect treatment delivery

How Outcomes are Measured and Minimum Thresholds for Achievement for these Objectives/Competencies:

- A. Students will administer, score and interpret two Wechsler Adult Intelligence Scale (WAIS; current version) or Wechsler Intelligence Scale for Children that will be evaluated for proper administration, scoring, and interpretation in PSY 756 and complete the assessment course with a “B” or higher grade
- B. Students will properly score and interpret the Minnesota Multiphasic Personality Inventory 2 (MMPI-2) (also in PSY 756)
- C. Students will successfully complete PSY 724, a methodology course that teaches heuristic errors, philosophy of science, validities (construct, internal, external, etc.) and classical psychometric theory including classic test theory and item analysis, reliability and factor analysis. This course must be passed with a grade of B or better.
- D. Students will successfully complete PSY 723, a research methodology course that addresses single-subject design including alternating treatment designs. These methods are particularly useful for assessing progress and controlling variables for within and between sessions. This course must be passed with a grade of B or better.
- E. Students will successfully complete PSY 743, our diversity course, so they can seek consultation when necessary or be informed that some modifications to treatment protocols are session plans may need to be made to be optimally effective for a particular client. This course must be passed with a grade of B or better.
- F. In addition to the above-mentioned courses, students will successfully complete our clinical core sequence that includes PSY 757 Introduction to Clinical Interventions, PSY 750 Seminar in Clinical Psychology (an applied course of the student’s choosing), the applied practicum series in the second and third years (PSY 714, PSY 715, PSY 716,

PSY 717, PSY 772). All clinical ratings by supervisors must be rated “at level of training” or higher on the objectives for Goal #2 (listed above) on program supervision rating forms. Clinical contact hours will be extended until such competency is met. Students must pass clinical supervision with a grade of B or better in PSY 714, PSY 715, PSY 716, and PSY 717, and that the Clinical Training Committee believes that the student has met the criterion. We require that students participate in three different teams across these courses. All of our teams are evidence based; all require demonstration of empirically focused case conceptualization skills; and all faculty supervisors watch tapes evaluating student competency in deployment of evidence-based methods. We have held students back when the CTC or individual supervisors are not convinced this competency has been met.

- G. Students will seek, obtain, and successfully complete APPIC accredited internships at a rate specified by CoA or higher. As noted above our placement rate is 93% on the first round of application with 100% of our students getting an internship placement upon re-applying the next year. Of the 41 students who received internships since 2008, only one did not attend an APPIC accredited program. This student was given special dispensation by the CTC due to significant family constraints regarding a sick child.
- H. Graduates who take the Examination for the Professional Practice in Psychology (EPPP) will pass at a rate of 80% over the most recent 5 year report from Association of State and Provincial Psychology Boards (the rate in the last report, dated 2012, was 100%; http://c.ymcdn.com/sites/www.asppb.net/resource/resmgr/EPPP_/2012_ASPPB_Exam_Scores_by_Do.pdf).

Goal #3 Students conduct themselves in accordance with APA and federal ethical standards in clinical and research activities:

Objectives for Goal #3:

- A. Students will develop clinical behaviors consistent with current APA ethical standards
- B. Students will conduct research consistent with institutional standards

Competencies Expected for these Objectives:

- A. Knowledge of APA current ethical standards
- B. Knowledge of relevant HIPAA standards as they pertain to our clinic and practica placements as evidenced by submitting certification of training from the Collaborative Institutional Training Initiative (CITI Program)
- C. Knowledge of institutional practices for the Protection of Human Participants

How Outcomes are Measured and Minimum Thresholds for Achievement for these Objectives/Competencies:

- A. Students successfully complete course in ethics and professional issues (PSY 771) with a grade of “B” or higher
- B. Prior to seeing clients students take a course presented by the Psychological Service Clinic Director making them familiar with the current relevant HIPAA regulations. Students must pass an exam on the HIPAA requirements.

- C. Students successfully complete an online research ethics training course (www.citiprogram.org) required by UNR's Research Integrity Office with minimum score of 80% correct
- D. Students conduct their research in accordance with Institutional Review Board approved procedures, i.e., all student research will be approved by the UNR IRB if not otherwise deemed exempt.

III.2 Graduate Students

Number of students at masters and doctoral level

Currently there are 41 Ph.D. students in the Clinical Program.

Data on the quality, number and diversity of students entering the graduate program.

The summary data for our applicant and incoming classes are listed in the tables below. We continue to get good students with good GPA's and GRE scores with only three students leaving the program in the last 7 years (a 93% retention rate). A goal at our last review was to increase the diversity of our program. Just tracking ethnic diversity below, we have made some strides in that area, though it remains an ongoing focus.

Applicant Pool Data

	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16
Number of applicants	111	114	113	158	121	0	75	73
Number accepted for admission	8	3	5	6	9	-	7	5
Actual size of incoming class	6	3	5	6	9	-	7	5
Ethnically diverse background	0 (0%)	1 (33%)	2 (40%)	1 (17%)	2 (22%)	-	3 (43%)	2 (40%)
% Students receiving financial aid	100	100	100	100	100	-	100	100

GRE Scores

	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16
	<i>Old scoring system</i>					<i>New scoring system</i>		
GRE - Verbal Score - Average	618	550	602	577	588	0	156	165
GRE - Verbal Score - Median	660	560	580	590	580	-	157	165
GRE - Quantitative Score - Average	653	630	644	652	661	-	152	161
GRE - Quantitative Score - Median	680	670	600	640	690	-	153	161
GRE - Advanced						-	710	760

(Psychology) – Not Required								
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GPA/ Degree Background

	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16
Number with psychology masters	1	1	0	1	1	0	3	2
Number with other type of masters	0	0	0	0	0	-	0	0
Average Undergrad GPA	3.7	3.1	3.7	3.7	3.7	-	3.4	3.6
Average Grad GPA	3.9	4.0	N/A	3.8	4.0	-	3.9	4.0

Outcomes

	Year of First Enrollment													
	08-09		09-10		10-11		11-12		12-13		13-14		14-15	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Students for whom this is the year of first enrollment (i.e. new students)	6	-	3	-	5	-	6	-	9	-	0	-	7	-
Students whose doctoral degrees were conferred on their transcripts	3	50	0	0	1	20	0	0	0	0	-	-	0	0
Students still enrolled in program	2	33	3	100	4	80	4	66	9	100	-	-	7	100
Students no longer enrolled for any reason other than conferral of doctoral degree	1	17	0	0	0	0	2	33	0	0	-	-	0	0

Recruiting and admissions procedures of the Clinical graduate program, including successful recruiting of underrepresented groups, out of state students, and international students.

Students are admitted based on a combination of factors including academic quality (GREs and GPA), previous research experience, and fit with program training model. All complete files are reviewed by at least one faculty member and we do not use a specific score to exclude files from review. We require three letters of recommendation. Letters that provide evidence of critical thinking and research experience are particularly valued. We also request a personal statement written by the student addressing their background and goals for graduate school and beyond. Student statements that demonstrate coherence and present a thoughtful reason for applying to our program are one important factor in making invitations for interview. Applicants are asked to indicate what their long-term goals are and if they have specific faculty in whom they are interested. After all files have been rated, the CTC meets to decide as a group on which students to invite for interviews. We value the ability for students to be admitted to the program as a whole, rather than acceptance to one particular lab.

Applicants are invited for in-person or phone interviews. If they visit our program, applicants are given the option to stay with a current graduate student to minimize interviewees' expense and allow them to interact with current members of the program. In this way they have an idea of how the intellectual and social aspects of the program function. However, applicants may also elect to stay in a hotel if that is preferable. The DCT provides an overview of the program at the beginning of the day, describing the interview process, program policy and procedures and the admission process. Applicants meet with several faculty members and have a reception at the end of their interview day so they can ask additional questions that may have emerged during their visit. Applicants are encouraged to call faculty and graduate students if questions arise after their visit. Overall, the process is designed so that all the features of the program are transparent, so that if the applicants receive an offer, they can self-select into the program with as much knowledge about the intellectual and social qualities of the program. The entire clinical faculty and a graduate student representative elected by the students make final selection of the applicants who are invited to join the program. This interview process has been very successful in that applicants routinely report that they had a very good idea of what to expect from the program.

Our offer letters to students guarantee funding for the first year at the equivalent of a teaching assistantship (the most common way students are funded during that year). We commit to trying to provide that same level of support for the 2nd through 4th years as well, but we do not guarantee beyond the first year. As previously noted, funding for advanced students comes from grants, service contracts, and clinical placements, but the source varies as grant and contracts come and go. There are additional monies for which our students often successfully complete including the Bilinski Educational Foundation Dissertation Year Fellowship, the Sanford Center on Aging Scholarship, and the Wilson Award.

In an effort to ensure the progress of minority students interested in research on cultural issues in clinical psychology, a minority research scholarship was established in 1994 in memory of Professor Jim Mikawa, a senior member of the core faculty who died in 1994. The Mikawa endowment is now in excess of \$100,000 and will continue in perpetuity. For several years, the Jim Mikawa Memorial Scholarship was awarded to one or two minority students each year to support their research. Currently, due to increases in student stipends, the fund provides support for between 1 and 1.5 graduate assistantships annually. Recently, Prof. Mikawa's wife, Lois Mikawa, further endowed this scholarship to a level that may support the creation of a diversity professorship.

Over ninety percent of our students are from out of state. In the time period since our last review in 2008, we have had students from Canada, Nepal, South Korea, Russia, Germany, and Brazil within our student body. We have graduated several students of Hispanic/Latino and Asian ethnicity, students with disabilities, and students from diverse socioeconomic backgrounds. We continue to promote diversity within our student body. We maintain close relationships with faculty at other universities to identify potential applicants.

Trends in clinical graduate student assistance

Twenty hour per week assistantships are paid at the University minimum of \$1,700.00 per month plus tuition waiver and health insurance benefits, which makes the value of the stipend worth approximately \$26,766.72 per year. These moneys come from two places. The first is through state-funded teaching assistantship lines. The second has been through research grants, state block grants for services, or graduate stipends for externship positions at the University Counseling Center or other local placements negotiated by the faculty. Since the previous review in 2008, faculty in the Clinical Program have been awarded grants from NIH to fund clinical research that has supported our students in paid Research Assistant positions. This funding and other service and training grants have funded GA positions for the majority of our senior students.

For the past 25 years, with the exception of one semester, the program has fully funded all of our students seeking support. However, this commitment to fund our students has been stretched in this last reporting period. The clinical doctoral program is the oldest, largest Ph.D. program in the state, and one of the largest at UNR. However, as noted earlier in this document, the economic downturn that began in 2008 had an adverse effect on university, federal, as well as state and local funding sources that affected our ability to support Ph.D. students resulting in a reduction in the number of students we admitted on two occasions. This is especially salient because co-occurring with this downturn, the main source of federal funding for applied clinical research, NIH, underwent a major revision by rejecting the established research classification system in favor a proposed dimensional system based on genetic, neurobiological, environmental and behavioral factors that might effect a new set of domains that are hypothesized to underlie mental health dysfunction across current categorizations. This has been a profound reorientation of the field in the types of proposals that could be funded as well as how clinical research is conducted, creating lags as labs re-orientated their programs of research.

Recently, this problem has stabilized to some degree. The faculty, using grants and service contracts, support all the students past their second year. This burden places a limit on the number of students the program can reliably sustain, making our program vulnerable to fluctuations in external funding. Recently, there has been a slight increase in state and local moneys for service grants to provide paid clinical externship experiences for our advanced students (see sample externship sites below). Obtaining and managing these grants have been the focus of considerable effort on the part of our faculty. This includes the Federal pass-through money from the Victims of Crimes Act. In addition, two of our faculty also were awarded a large clinical training grant from the U.S. Department of Health and Human Services Health Resources and Services Administration that has proved support for 3-4 of our advanced students at a local Federally Qualified Health Center.

Increases in opportunities to support students in their third year and beyond using service grants are both a positive and a negative. On the positive side, it has allowed for distribution of state supported TA lines allocated to the program to students in their first and second years. This when combined with the TA line to support the PSC Director, will allow support for nine, possibly ten students (four or five per year) in the first and second year classes. However, this represents an ongoing contraction for the Clinical Program as a result of the economic downturn. The number of students will remain unchanged unless there is an increase in the number of state supported GA lines dedicated to the program in today's environment of restricted Federal

resources (which are the only resources available to support first and second year students besides GA lines). The number of GA stipends given by the university to the clinical program has only increased by 1.5 since our last program review in 2008.

While increases in service grant opportunities have been a positive and allowed for continued viability of the program, there is a downside. Currently advanced students put forward for externships have included third year students and beyond who have had adequate clinical training in preparation for these externship experiences. First and second year students have not yet had the training and experience necessary for externships. Placing students in externships in the third year is a change in our model in that prior to 2008 students were not typically allowed to apply for externships until their fourth year, with the third year students receiving extra in-house clinical mentoring before externship. While third year students still receive the same mentoring from clinical faculty, funding concerns have driven the need for them to take placements in externship sites in addition to this mentoring and their classwork. There are concerns that the earlier timing of externship placements will delay student progress through the program despite the changes we have implemented to facilitate student progress. Off campus externship placements also draw students away from the lab and their respective research projects. Additional GA lines from the university would ameliorate this problem.

Extent to which students enhance their academic courses through seminar or speaker series, internships, study abroad, attending professional conferences, etc.

Our students regularly attend professional conferences for regional, national, as well as international organizations. Practicum and externship sites provide a variety of applied experiences:

The Psychological Service Center and Associated Projects. The Psychological Service Center is the in-house training clinic for doctoral students in the Clinical Psychology Program. The clinic accommodates a wide range of clientele with diverse psychological problems. Its primary mission is to provide training for students in the program, however an additional significant function of the clinic is to provide outreach to the Northern Nevada Community by attempting to provide psychological services to citizens of Nevada, independent of their ability to pay. The practica requirements for the first three years of the program are normally fulfilled in the PSC.

The Victims of Crime Treatment Center is a grant funded program supported by the federal justice department Victims of Crime Act (VOCA) grant to the State of Nevada. Core faculty members Drs. William O'Donohue, Jane Fisher, and Alan Fruzzetti are co-PIs on this service grant. The center is housed within the PSC, and provides psychotherapy for children and adults who have been sexually abused or assaulted, as well as psychotherapy and support services for parents of sexually abused children. The Domestic Abuse Program, directed by Dr. Alan Fruzzetti, provides support services and psychotherapy for women victims of domestic violence.

The Nevada Caregiver Support Center (NCSC) is a service, research, and training center that provides evidence-based support services to persons with neurocognitive disorders and

their family caregivers in Reno/Sparks and rural communities throughout northern Nevada. The NCSC, under the direction of core faculty member Jane Fisher, has been funded by grants from the Department of Justice, Nevada Aging and Disability Division, the National Institute on Aging, and the U.S. Administration on Aging. NCSC programs are based on a stepped care model and are designed to promote quality of life and prevent excess disability in persons with dementia and to provide educational and emotional support to family caregivers to prevent stress-related physical and psychological problems commonly experienced by family caregivers. Caregiver Coaches provide services in several locations including client homes, the NCSC office in the Sanford Center on Aging, and at venues throughout northern Nevada (e.g., County Senior Centers, assisted living facilities, group homes, nursing homes, etc.). A 24-hour toll-free Caregiver Helpline is available so that families can contact a Caregiver Coach round-the-clock if they need assistance in responding to challenging behaviors in their family member. The NCSC staff also provides training in evidence based geriatric behavioral health practices to professionals throughout Nevada.

The following agencies serve as externship training sites for students:

Example Externship Sites

DBT programs at Willow Spring Center is a 20-bed residential Dialectical Behavior Therapy program designed to treat adolescents with severe emotion dysregulation and a multi-problem presentation (typically self-harm and suicidality). Willow Springs' DBT program is most appropriate for suicidal teens who exhibit severe, chronic forms of emotion dysregulation with multiple coexisting problems, as well as for youths that struggle with emotion dysregulation, chaotic relationships, impulsivity, para-suicidal behaviors and identity disturbance. Up to 25% of the cases in the program suffer from eating disorders and require medical monitoring and intervention. The complex presentations of the patients in the program often have been resistant to treatment resulting in frustration, exhaustion of families and cost to payers. Externs working with the DBT team works as therapists addressing DBT skills training in intensive individual, family and group therapy setting working with a multidisciplinary teams of psychiatrists, therapists, nurses, and direct-care coaches. Students placed at this location are under the direction and supervision of core faculty member, Alan Fruzzetti.

DBT program at Center for Hope of the Sierra is an eating disorders treatment center. Externs work teaching DBT skills in residential, partial hospitalization, and intensive outpatient settings working with a multi-disciplinary team including a psychiatrist, medical internist, registered dietitian and nutrition therapist with a PhD in nutritional biochemistry, licensed marriage and family therapists, licensed clinical social workers, and 24-hour nursing and patient assistants. Students placed at this location are under the direction and supervision of core faculty member, Alan Fruzzetti.

The Community Health Alliance (CHA) is the only Federally Qualified Health Center in the Reno area servicing about 3,000 adult and 1,600 pediatric patients a month. HAWC provides a comprehensive range of primary health care services medically under-served low income,

uninsured, and Medicaid populations. Students perform a full range of appropriate psychology services under supervision from core faculty members, Dr. Victoria Follette and Dr. William O'Donohue. This includes serving as an integrated behavioral health provider in both pediatric and adult clinics serving English speaking and Spanish speaking population, running stress management groups, working with primary care physicians across clinics to identify and provide brief interventions for those patients with primarily behavioral health needs or whose behavioral health needs interfere with medical treatments to increase overall well-being and decreased utilization, and consulting with administrative and medical staff on the implementation and assessment of integrated care efforts.

The UNR Counseling and Testing Center is an on-campus facility for professional counseling and related services, and is funded and supervised by UNR Student Services. The Center offers free counseling to undergraduate and graduate students attending UNR, as well as a substance abuse program that offers workshops and seminars for the University community. The Testing Services office schedules and administers national and institutional tests that are required for admissions to undergraduate and graduate programs and professional schools (i.e., ACT, GMAT, GRE, LSAT, etc.)

Regional Rural Clinic is one of 14 mental health centers located throughout rural Nevada. These centers comprise Rural Clinics Community Outpatient Services, which is a service of the state Mental Hygiene and Mental Retardation Division. The Carson center is located in Carson City, and offers a wide variety of mental health services to residents of the area, including family and individual therapy, drug therapy, assessment and consulting.

Sierra Regional Center, a state facility for the mentally retarded, is located in Sparks, and provides services to people living in Washoe County. SRC coordinates services offered by various providers, addressing such needs as residence, financial support, work and training for its clients. We have had a student there for more than a decade. SRC is the state-operated regional center for individuals with developmental disabilities and related conditions and their families. At one time SRC was an in-patient facility but over the last several years it has become primarily an agency that facilitates independence and community placement.

Provide quantitative and qualitative measures of student research output, such as publications, professional presentations, citation indicators and student awards over the past 7 years.

We have not formally tracked these data. Our students are expected to publish in peer-reviewed journals, contribute review and theoretical pieces to book projects, and present at professional conferences as a part of their education. A review of faculty CVs indicates that our students have produced 145+ publication and 220+ conference presentations since 2008. Our students have done well competing for Bilinski and Wilson awards, Sanford Center on Aging Scholarships, national awards, and federal training grants.

Summary of employment history of graduates over the last 7 years

Of the 50 students who graduated since 2008, 12 are recent enough to still be in postdoctoral fellowships. Of the 38 who have started their professional careers, 15 (39%) have research positions either in academic settings (9) or as Clinical Research Psychologists at a medical research center/ teaching hospital (6), 15 (40%) are staff psychologists at a medical center/hospital focused mainly on healthcare service provision, 7 (18%) are currently in private practice as licensed psychologists, and one (3%) joined the FBI.

How are their successes monitored? Compare this summary to similar sized programs in the US and also to the top rated programs in the US.

The data reported above is collected annually for our Annual Report to the APA Commission on Accreditation (CoA). The CoA publishes the findings from these reports. At the time of this writing, the most current data published is from the 2014 data. The following table is from the CoA's 2014 Annual Report Online Summary Data: Doctoral Programs (<http://www.apa.org/ed/accreditation/about/research/2014-doctoral-summary.pdf>). It provides a baseline to compare how the graduates from the UNR Clinical Psychology program compare to national averages.

II-E-1. Initial Employment Setting - Clinical Ph.D.

Employment Settings	Program Mean Percent of Former Students Employed in Each Setting
Academic Teaching	29.33
Community Mental Health Center	11.00
Consortium	1.02
Correctional Facility	2.53
Health Maintenance Organization	1.44
Hospital/Medical Center	40.20
Independent Practice	16.29
Psychiatric Facility	4.58
School District/System	2.70
University Counseling Center	3.54
Other	13.32

III.3 Analysis

Analysis of the graduate programs and outcomes

Our goals/objectives are that faculty and students, as clinical scientists, make significant contributions in the traditional areas of academic clinical psychology or in the area as applied discipline within larger health care systems. For students, this necessitates that we provide adequate education/training in clinical science to students via research and clinical mentorship, practica, and formal classroom training in an atmosphere that promotes productivity and engagement. For faculty, this requires adequate resources, administrative structure, and an

atmosphere conducive to the production of scholarly work.

Program faculty, structure, and resources

Compared to similar programs, we are a small program with a faculty stretched in mounting a strong graduate program while also servicing undergraduate needs of the largest department in the college at a land grant institution. In terms of our strengths, in addition to the strength of our graduates and the standing our faculty have in the field of clinical psychology, we are among the top programs/departments at UNR in terms of number of Ph.D.'s graduated, and are a nationally ranked program. The Clinical Psychology Program currently has a core faculty of eight and a current enrollment of 41 doctoral students. A ninth tenure-track position that has been associated with the Clinical Program is currently filled by Steven Hayes, who changed his program affiliation to the Behavior Analysis Program at the beginning of the 2015 Fall semester. We are currently conducting a search for a newly created tenure track position in addition to the existing tenure-track positions in the program. This will be the second new faculty line in the Clinical Psychology Program since 1989. However, with Prof. Hayes' move to the Behavior Analysis Program, the Clinical Program is left with at an effective increase of only one position since 1989. At this point there is no guarantee that the position will be returned to the Clinical Program limiting our planned growth.

Student outcomes

Internship placement

An objective of our program is to have committed and dedicated clinical faculty who serve as mentors, modeling the best characteristics of the scientist-practitioner clinical psychologist. Faculty members are committed to providing the best possible education and clinical training for students. In this respect, they strive to provide an open and intimate learning atmosphere, create a positive mentor model, provide intensive supervision experiences, and to develop a team atmosphere on research and clinical projects. The core faculty provides virtually all of the clinical training and mentoring during the first three years of the program assuring that students feel well mentored while learning therapeutic skills.

In assessing whether our clinical training and associated practicum experiences are sufficient for internship preparation, we monitor: 1) our match rate at accredited internship sites; and 2) the end of year feedback from the internship sites. With respect to our match rate, over the last 7 years we have a 93% (38/41) match rate at some of the most competitive internship sites in the country. Those who did not match initially did match at accredited sites the following year. Year-end evaluations of our students from internship sites have consistently indicated our students are very well prepared. Internship directors are highly complimentary of our students. Many nationally competitive sites have continued to accept our students over several years, and offer staff positions or postdoctoral fellowship opportunities. Thus, both our internal assessments and evaluative feedback from internship directors support the success of our practicum training.

Internship Placement

Outcome	08-09	09-10	10-11	11-12	12-13	13-14	14-15
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	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Students who sought or applied for internships*	5	-	4	-	10	-	4	-	6	-	10	-	2	-
Students who obtained internships	2	40	4	100	10	100	3	75	6	100	10	100	2	100
Students who obtained APA accredited internships	2	40	4	100	10	100	3	75	6	100	9	90	2	100
Students who obtained APPIC member internships that were not APA/ accredited	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Students who obtained other membership organization internships (e.g. CAPIC) that were not APA accredited	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Students who obtained internships conforming to CDSPP guidelines that were not APA accredited	0	0	0	0	0	0	0	0	0	0	1	10	0	0
Students who obtained other internships that were not APA accredited	0	0	0	0	0	0	0	0	0	0	0	0	0	0

*This includes students that withdrew from the internship application process

Employment placement

The number of graduates who have entered academic environments or research jobs after graduation is extraordinary suggesting the program has been remarkably effective in its stated goals of applying clinical science across multiple domains.

Curriculum analysis: Impact of ongoing assessment and student learning outcomes in program change

As noted, the clinical psychology program has made a number of curricular changes. These have included:

1. Formalized expectations for comprehensive exams due dates
2. Moving the statistics sequence to the first year so that the research method and statistics sequences occur in parallel to facilitate completion of pre-dissertation research project.
3. Redesigning our clinical didactics sequence to integrate clinical skills training with practicum experience and related topic matter.

The latter change is being pursued to create efficiencies in the clinical training sequence in order to reduce the overall credit hours required but still allow students to gain competency in the domains of discipline-specific knowledge required by our professional accrediting body and our

own goals as a program for clinical training. Specifically, the changes to our clinical didactics sequence will provide students opportunities to strengthen their clinical science training by pursuing further classroom experiences in methods and statistics (a goal facilitated by a recent hire in the Psychology Department of a faculty with a quantitative background). In addition, the clinical didactics sequence expands students' opportunities for formal didactics to better prepare them to conduct research and design services within integrated behavioral health settings. Changes in our clinical didactic sequence include the addition of classes on issues and methods of integrating behavioral health into medical/primary care practice, a specific class on program evaluation, classes on the special needs of underserved populations, and classes on health policy. This includes classes offered in the UNR Clinical Psychology Program as well as the UNR Public health department – all topics critical for the expanding role of psychologists in healthcare administration in the U.S.

It is our plan that these extra classes will be integrated into individual students' doctoral degree requirements such that the classes fulfill the Broad and General requirements required for accreditation by the American Psychological Association and for specialized clinical training as determined by UNR's Clinical Psychology program. As an American Psychological Association accredited program, we are required to have students to complete an extensive course load, which has made it difficult (though not impossible) for students to participate in extra didactics. The new curriculum integrates APA requirements more comprehensively in core clinical classes and allows for faculty to focus on developing classes that incorporate and address program goals for our students.

In terms of our student learning outcomes, the Clinical Program was reviewed by APA for accreditation in 2012-2013. A key component of this review was evaluation of the degree that the program meets the student learning outcomes that are listed in this report. A result of that review was refinement of the measurement and documentation of the program learning outcomes, which is currently reflected in the student learning outcomes, included in this report.

To what extent does the curriculum meet current and future student needs?

The changes listed in the previous section were based on: (1) analysis of proximal and distal data collected as a routine part of maintaining our accreditation from current students, and (2) a recognition of the need to provide more extensive training in clinical science and/or integrated care given changes in academic psychology and national changes in the delivery of behavioral healthcare (driven, in part, by the passing of the Affordable Care Act). Continued formal and informal review of program data and outcomes is built into the program governance, which will lead to ongoing, iterative revision of the program to meet the needs of our students.

Are the retention and time to degree numbers appropriate for your program and students?

As noted above, retention rates within the clinical psychology Ph.D. program are excellent. Our time to competition, though well within the range of averages in APA accredited programs, is longer than the overall national average. While our time to completion has been improving over time, it remains a focus. Some of the recent curricula changes have been adopted to facilitate students completing the program faster. However, as noted, our commitment to funding our

students and the subsequent increase in service contracts to fulfill that goal may offset this change. This is an ongoing concern and will be monitored closely in the coming years.

Provide an assessment of the effectiveness of academic advising, mentoring and thesis direction in the program.

Much of the training in research and application of research to real world problems occurs in the context of student-faculty mentoring in our labs. In addition, the bulk of our students' clinical training is completed under faculty supervision and mentorship – a process informed by application of clinical science to psychological problems and treatment delivery. Given the goal of training clinical scientists to work in academic and applied settings, the fact that our students are very competitive nationally for the top internship sites, that they move on to prestigious post-doctoral position, and the initial employment settings of our graduates indicate that the program is highly successful.

Trends in recruitment, enrollment, retention, and success of graduate students

On average across the 7 years in this period, 28% of our students were from underrepresented groups or international students. Of the students that were admitted since 2008, all but four were from out of state. Overall, we appear to be doing an adequate job in terms of recruiting underrepresented groups, though this remains an ongoing effort. Recruiting out of state students does not appear to be a problem. These rates appear to be stable. In addition, once recruited and enrolled our retention rate remains high, as it has historically. As noted in the section entitled “Trends in clinical graduate student assistance,” the economic downturn had an adverse effect on our ability to support students resulting in a reduction in the number of students we admitted on two occasions. The funding shortage problem has stabilized to some degree as the clinical faculty have identified state and federal sources of service grant funding. However, there is a concern that reliance on off-campus externship placements may impact student outcomes in the future in terms of research productivity, time to completion, and obtaining clinical science positions. Increases in GA support from the university would remedy this problem.

Part III E Neuroscience Graduate Program

The Neuroscience Graduate PhD program was begun this semester (Fall of 2015) so the program will be described only briefly here. There are currently 8 students enrolled in the program with 4 mentored by professors in Biology and 4 mentored by professors in Psychology (CBS). All of the CBS faculty contribute to teaching the graduate curriculum for the Neuroscience PhD. There is currently 1 graduate teaching position allotted to Psychology for graduate student support (funded through the graduate school). The remaining students are being supported on grants or through Psychology assistantships. The program is currently recruiting for additional students to enter in Fall 2016.

Part IV: Department Faculty

IV.1 Faculty Composition and Workloads

The Psychology Department is committed to the advancement and dissemination of knowledge that will improve our understanding of psychological events, and will in turn improve the human condition. To that end, the Department seeks to employ and develop high quality faculty, who

- show excellence in teaching, research, and service
- are good citizens of the Department, College, and University
- in their roles as psychologists, positively impact the discipline and society itself regionally, nationally, and internationally.

The department has grown very little in, renewable, hard-money faculty lines since the program reviews in 1999 and 2008. We have had several faculty searches in the last decade that have led to a number of successful hires. However, these have primarily been replacement hires. The department has made an effort to recruit a diverse group of candidates in all three program areas, with varying degrees of success.

Notably, since the recent economic recovery as well as the success of the COBRE grant and the subsequent recognition of the importance of Neuroscience, the Psychology Department has begun to grow again with new faculty lines in all our program areas and also one in Social Psychology. As a result of the Provost's "cluster hire" initiative, CBS has been promised four new hires over the next several years, contributing to the growing cluster of neuroscience faculty. A similar, parallel commitment has been made to Biology to compliment these hires. Thus although faculty growth has been stagnant over this program review period, there have been recent moves to rectify this situation. If these promised changes are realized, they should be reflected in the 2022 Program review.

Continuing Faculty

As of Fall 2015, the Department of Psychology has 23 continuing faculty, with 22 faculty in tenure track positions, one more than reported in our 2008 program review and one additional position as non-tenure track Assistant Professor that is being supported halftime on the COBRE grant as a Core Director and half time on the Department's funds for teaching. However four faculty lines have been converted from 0.5 FTE to 1.0 FTE effectively increasing our faculty FTE by 3.0 since our last review. There are currently 5 positions in the process of being filled with 4 of those being tenure-track lines and one being an advisor/lecturer.

Faculty member's duties consist of an assigned combination of teaching, scholarly and creative activity, and service or professional development. Each faculty member develops an individual role statement in consultation with the chair. The typical role statement is Teaching 40%, Research 40% and Service 20%. However, a number of factors including administrative duties, sabbaticals, or specific teaching/research obligations can lead to an adjustment in the role statement. Role statements are updated yearly. Role statements that vary significantly from the standard balance must be approved by the Chair and the Dean. In balancing professional responsibilities, faculty may be involved in a number of activities including the following:

- A. Instruction. Instruction includes activities such as classroom teaching; extension or off campus teaching; preparation and development of courses, including syllabi; evaluation of student performance; consultation with students; direction of undergraduate and graduate students in independent study, research, internships and practica; advising of undergraduate and graduate students; professional development of teaching skills; and service on undergraduate and graduate committees. Normal course load for our department is typically 2 courses per semester.

- B. Scholarly and Creative Activity. Scholarly and creative activity includes the advancement, integration, and application of knowledge through research and scholarship related to the faculty member's discipline, leading to products such as books, articles, software, and public presentations; studies designed to enhance the teaching of that discipline; seeking and acquiring outside funds (e.g. grants and contracts) in support of scholarly and creative activity.

- C. Service. Service includes activities such as:
 - (a). University service: Administrative activities; participation on College, Department, and University committees, boards, and panels and similar activities; assigned professional responsibilities of administrative faculty members;

 - (b). Community/outreach service: consulting, committee work and other services to community groups, projects and organizations where such service is intrinsically related to the professional competence of the individual faculty member;

 - (c). Disciplinary service: activities related to professional growth and development, holding office in professional organizations, editing and refereeing for professional journals, reviewing research proposals, and similar professional activities

New Faculty

Since our last review, the department has lost 6 faculty to either retirement (2), resignation (3), or termination (1). All of these faculty lines have been replaced except one. An additional search is currently ongoing for this remaining position (in Social Psychology) as described below.

The clinical program has recently had one faculty member transfer affiliation from Clinical to Behavior Analysis (Steve Hayes) bringing the total count for Clinical faculty to 8 (down from 9 in 2008). The Clinical program is also currently searching to fill a new faculty position that was approved prior to the decision of Dr. Hayes to change affiliations. At the end of the last review period, Dr. Anthony Papa was hired to replace Dr. Friman who resigned. Dr. Papa has remained and flourished in the program.

The Behavior Analysis program has continued to evolve in the development of their program. At the time of the last review (2008), Behavior Analysis had one fully state funded line and four 0.5 funded state lines. In response to suggestions made in this prior review and the instability in the funding model for this program, new lines were added to the Behavior Analysis program and the Behavior Analysis grew to 5 fulltime faculty positions and no half time positions. During this last review period a newly hired faculty member (Dr. Alavosius) failed to obtain tenure and promotion and his employment was discontinued. A new faculty member (Dr. Mathew Locey) was hired to replace him. Dr. Locey is currently on track for tenure and promotion. With the addition of Dr. Hayes, the faculty FTE count for Behavior Analysis is now at 6, 3 more than reported last review period.

Since the last program review, the Cognitive and Brain Sciences program has begun to see a modest amount of change and growth. The newest hire in the previous period, Dr. Wessinger resigned prior to tenure review. Dr. Berryhill, who conducts research in memory was hired to replace him. She has flourished and is currently up for tenure and promotion. The program has also seen two retirements since the last review (Drs. Wallace and Gardner). CBS has successfully replaced these faculty members with new hires (Dr. Gideon Caplovitz, Dr. Jacqueline Snow) and added a new faculty position, (Dr. Fang Jiang). Dr. Caplovitz is currently up for tenure and promotion with a very productive record. Drs. Snow and Jiang are doing well and are making impressive progress. This puts the current count of CBS faculty at 7, up from 6 at the last review. We also have a faculty member (Dr. Lars Strother) that is teaching courses and mentoring a graduate student in CBS. Lars is currently non-tenure track Assistant Professor and is supported half time on the COBRE grant as the Core B director and half time by the department for his teaching. He has been offered a tenure track position in CBS and is in the process of being hired. Lars would officially start in Spring 2016. The need for additional growth in this program outlined in the last review has recently been recognized and CBS has been promised new hires (see Planned Hires below).

During the period since the last program review, a position was also added in Social Psychology with an emphasis on computational analysis and statistics. This position was to be part of the Interdisciplinary Social Psychology Program with Psychology as the home department. Dr. Justin Hepler was hired into this position after a successful search. However in 2015, Dr. Hepler left the Department in order to take a job in industry. We are currently searching for a replacement for Dr. Hepler to be filled in Summer of 2016.

Planned New Positions

As mentioned above, CBS has been promised four new hires over the next several years (2 to start in 2016, and 1 each in 2017 and 2018). An additional search for a faculty position in Clinical has also begun with a start date of 2016. Finally another search is being conducted for a non-tenure track advisor/lecturer to assist in undergraduate advising and teaching of introductory level courses. Consequently, the department is currently conducting 5 faculty searches, 4 for new faculty (3 tenure-track) and 1 replacement hire to start in July 2016. If these searches are successful, this will bring the full-time, tenure-track faculty count to 26 in 2016.

**Composition of the Department of Psychology instructional staff by
faculty rank, employment status, terminal degrees held, gender, and
ethnicity—Fall 2015.**

POSITION	NUMBER	STATUS	TERMINAL DEGREES	GENDER	ETHNICITY
CONTINUING FACULTY	23				
tenure-track	22				
--professor Rank IV	11	tenured	11	4 F, 7 M	11 Caucasian
--associate professor Rank III	6	tenured	6	3 F, 3 M	5 Caucasian 1 African Am.
--assistant professor Rank II	5	tenure-track	5	3 F, 2 M	4 Caucasian 1 Asian
LECTURERS	1		1	1 F	1 Caucasian
TEACHING ASSISTANTS (not faculty appointments)	17	N/A	N/A	Varies	
LOA INSTRUCTORS (not faculty appointments)	6	contingent		Varies	

Tenure-track Faculty Subject Specialties

Clinical: (8) Fisher, W. Follette, V. Follette, Fruzzetti, Duckworth, O'Donohue, Hazlett-Stevens, Papa

Cognitive Brain Science: (7) Berryhill, Caplovitz, Crognale, Hutsler, Jiang, Snow, Webster

Behavior Analysis: (6) Ghezzi, L. Hayes, Williams, Locey, Houmanfar, S. Hayes

Social: (1) Davis

Faculty salary

We are fortunate in that salaries for tenure track faculty lines are in line with those of our peer institutions. Our department participates in APA salary surveys, providing us with access to the most current salary figures. The data from that survey and other national indicators are generally acceptable, (At times housing costs in Reno have been an issue in recruitment.) The data for 2013-2014 are shown below as an example. UNR salaries are compared with those for other PhD granting institutions in the US and in the West region that includes Nevada. Salaries for Full Professors and for Associate Professors are shown for greater than 12 and 6 years of time-in-rank respectively, reflecting the average time-in-rank at UNR.

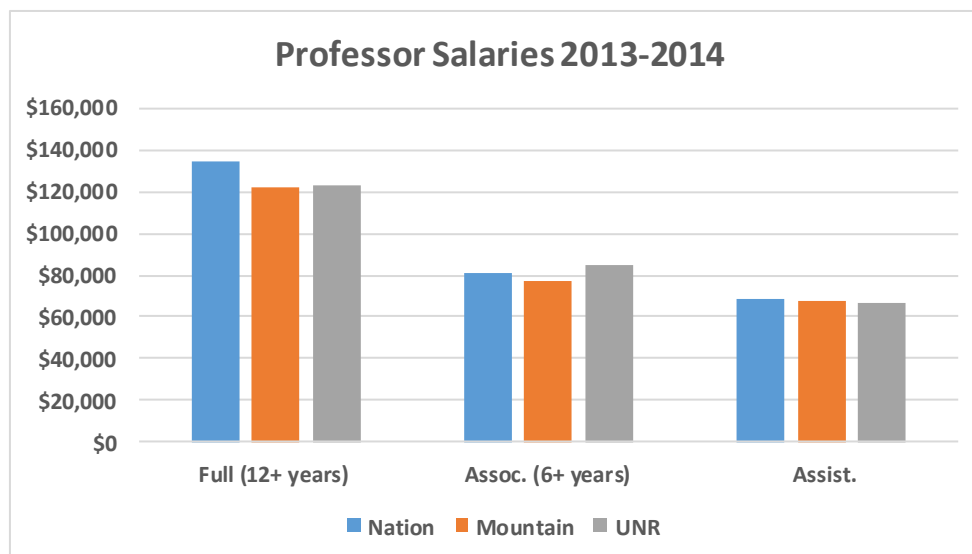


Figure IV.1 Faculty salary comparison.

However it should be noted that during this last review period 2008-2015 and as a result of difficult financial times, salaries have remained flat. Academic year 2008/2009 was the last year that UNR faculty received a cost of living (COLA) adjustment (4%) despite rising living costs that were outstripping this previous COLA amount. In addition 2008/2009 was the last year that we received monetary compensation for merit until 2014. During this time, the majority of our faculty were awarded “merit”, with 2-3 steps being the typical award. However there were no funds allocated to these merit steps until 2014 and consequently no increase to base salaries. In 2014 merit steps were again funded at \$1,180 per step. Finally, from 2011 to 2015 academic faculty have been on a forced furlough of 2.3% resulting in a decrease in take-home salary. Thus take home pay at the end of 2014 was 2.3% less than 2009. Needless to say faculty morale has not been boosted by this situation. Despite this situation, the psychology faculty have continued to be highly productive and to accommodate increased enrollment and consequential increases in teaching load. It is likely that these efforts help spare the Psychology department from further cuts in resources and faculty positions that were experienced by many other departments on campus.

A further consequence of the difficult financial period as well as generally insufficient cost-of-living increases is that there is now significant salary compression and even some salary inversion within the department. This can be a serious issue for retaining quality faculty as they advance in rank. As we continue to add exceptional faculty to our department with increasing salary competition from other institutes, this problem is likely to increase.

Teaching Productivity

At the undergraduate level the Department of Psychology is among the more productive in the College in terms of student credit hours and degrees. This pattern is replicated and extended in the graduate area.

Credit Hours

One metric for evaluating teaching productivity is student credit hours. It is conceptually and practically more meaningful to examine student credit hours by first converting them to FTE (full time equivalents – or the number of students the credits represent assuming an expected full time class load). The FTE metric also relates teaching load to the state funding formulae and also allows graduate student and undergraduate student teaching productivity to be combined properly.

Undergraduate Teaching Load

Over the five semesters spanning Spring 2013 to Spring 2015 Psychology has generated a total of 2613.5 undergraduate FTE. This accounts for over 11% of all Undergraduate FTE generated by the College of Liberal Arts over this period. On average over this period the 22 tenure track faculty within the Department of Psychology generated 118.8 undergraduate FTE per state funded faculty FTE or 23.8 undergraduate FTE per semester. Excluding Core Humanities this is ~17% higher than the average department in the College of Liberal Arts which generates ~20.3 undergraduate FTE per faculty FTE. It should be noted that there are departments with relatively large numbers of Letter of Appointment faculty, which are little used in Psychology. These faculty credit hours are not included in the comparisons. However, the student FTE's are included. Consequently, the values stated above greatly overestimate the averaged teaching loads for the CLA departments other than Psychology.

Graduate Teaching Load

Over the five semesters spanning Spring 2013 to Spring 2015 Psychology has generated a total of 508.5 graduate FTE. This accounts for 32% of all graduate FTE generated by the College of Liberal Arts over this period. In comparison the average of all other graduate generating departments within the College of Liberal Arts is 87. On average over this period the 22 tenure track faculty within the Department of Psychology generated 23 graduate FTE per state funded faculty FTE or 4.6 Graduate FTE per semester. This is a full 3 Times higher than the average department in the College of Liberal Arts which generates ~1.5 graduate FTE per faculty FTE per semester.

Total Teaching Load

Over the five semesters spanning Spring 2013 to Spring 2015 Psychology has generated a total of 3122 FTE Psychology and on average has generated 28 total student FTE per state funded faculty FTE per semester. Excluding Core Humanities, this is ~28% higher than the average department in the College of Liberal Arts which generates ~21.8 total student FTE per faculty FTE. Again, these numbers are highly skewed and the difference between Psychology and the other departments on average is very conservative as they do not count the large amount of LOA teaching done by many other departments.

IV.2 Research, Scholarship, Creative Activity, Outreach, and Professional Service

Productivity, Impact, and Funding

The psychology program at UNR emphasizes an integrative model that links our teaching, research and applied work. Our different departmental programs comprise both basic experimental psychologists and clinical scientists who do both basic and applied research. Thus, our vision incorporates a simultaneous advancement of the various goals described in this document. Because of the contextual nature of our work, enhancement in one area will lead to growth in another as a matter of course. Our field is extremely diverse and the department has many different goals for increased excellence based on an analysis of our current status.

We are influenced by trends in science-based Psychology departments. In a field that has at times been overly identified with “soft science” and cultural trends, we have remained steadfast in our commitment to intellectual rigor and the scientific method. The field of psychology includes a wide range of specializations, theoretical orientations, and analytical perspectives that can result in a fragmented identity. To combat this fragmentation and erosion of identity, the department has decided to focus its growth in its areas of greatest strength. Given environmental constraints in size, we have elected to focus our growth in targeted areas of research. This targeted growth allows for a department of our size to achieve national prominence in selected areas. In order to evaluate the productivity of Psychology faculty, we considered some major metrics of performance: number of publications, and grants.

Publications

In order to examine the productivity of psychology faculty we looked at a representative of total publications by examining the number of peer-reviewed articles, books and book chapters published from 2008-2015. During this period there were approximately 470 peer-reviewed articles, 250 book chapters and 50 books published by our current tenure-track faculty (excluding those faculty that are no longer in the Department). This averages to about 35 publications per faculty member. The peer-reviewed research conducted over this period has been consistently published in high-impact journals including the premier journals of each of the content areas within the Department. These include: *Current Biology* (2012 Impact Factor: 9.494), *Philosophical Transactions of the Royal Society B* (Impact Factor: 7.055), *Clinical Psychology Review* (Impact Factor: 6.932), *Journal of Neuroscience* (Impact Factor: 6.908), *Human Brain Mapping* (Impact Factor: 6.878), *Cerebral Cortex* (Impact Factor: 6.828), *Journal of Experimental Psychology: General* (Impact Factor: 4.759), *Psychological Science* (Impact Factor: 4.543), *Journal of Behavior Therapy* (Impact Factor: 3.694), *Physiology and Behavior* (2.976)

Grants

Grant award amounts for **psychology** and the rest of the College not counting psychology are shown below. In 2015 alone, Psychology has procured over 2.8 million dollars in grants and contracts, or about \$130,000 per faculty FTE per year.

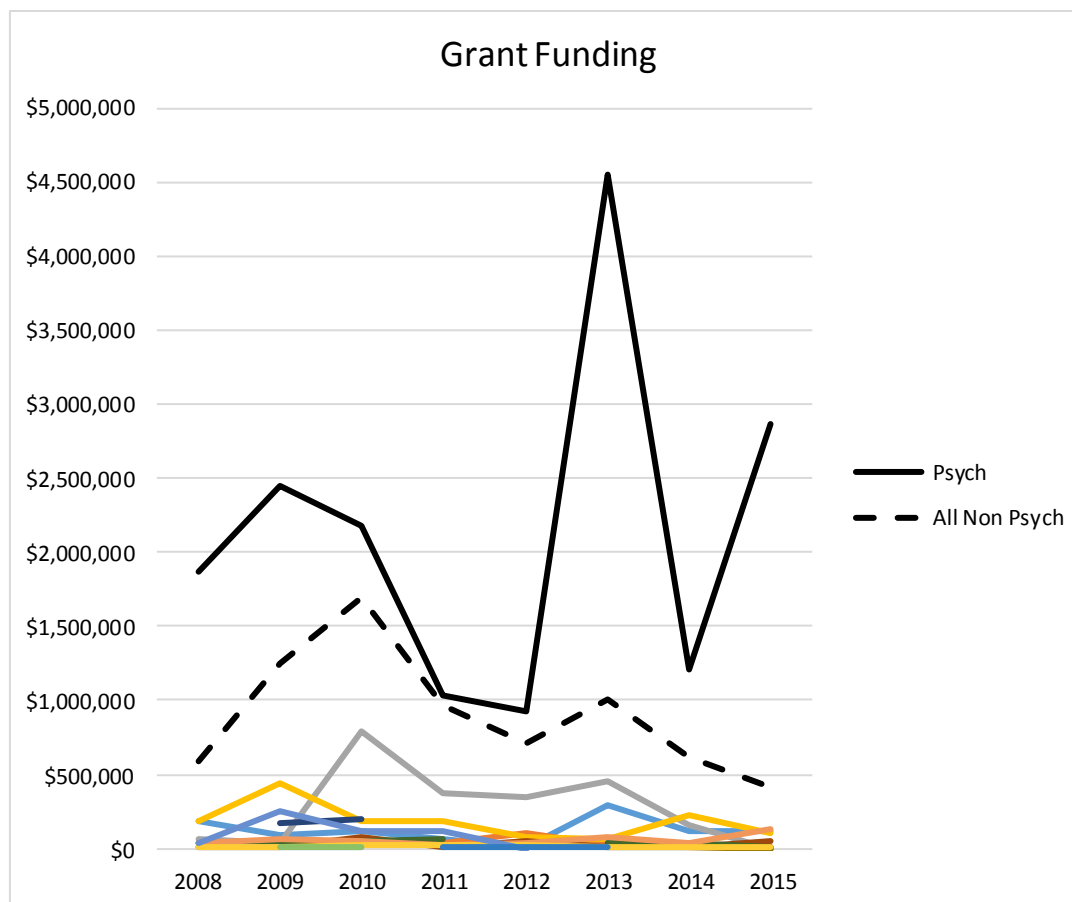


Figure IV.2 External funding for Psychology and all other departments within the College of Liberal Arts.

A comparison of external grants in the Psychology department with those from other departments in the College of Liberal Arts is shown in Figure IV.2. The dashed line shows the sum of the grant awards from all the other departments. It can be seen that in 2015 Psychology brought almost 6 times more than all the other departments combined. The large amount of F&A funds generated by these awards provides enormous support to the College.

Much of the success in grant funding is due to the large COBRE grant that established the Center for Integrative Neuroscience. Numerous other large grant applications are pending and we expect or success in this area to continue to improve. It should be noted however, that the infrastructure for grants continues to be weak. Space is a severe problems and over this period there has been minimal secretarial and administrative support provided to the College and Department for grant and contract activity.

Outreach

Faculty in the department continue to work to expand ways in which to contribute their expertise to the community in a variety of outreach activities. Our service involves a wide range of

community stakeholders including state funded mental health organizations, non-profit agencies, and individuals with known needs. We provide professional services to families and individuals in the areas of autism, gerontology, substance abuse, and general psychotherapy. Some examples of outreach are described here briefly:

Cognitive and Brain Science Outreach

During Brain Awareness Week, Dr. Gideon Caplovitz' lab gives presentations of visual illusions to kids at the Planetarium and Discovery Museum. Other faculty members and graduate students also participate in Brain Awareness Week activities such as presentations at public schools around Reno.

Color Vision Assessment Clinic Dr. Crognale runs a color vision assessment clinic as a public service. The assessment clinic utilizes a battery of color vision tests to diagnose and characterize color vision deficiencies. Some of the tests that are available are rare or require special training to administer and evaluate. Many of the tests are accepted by government agencies such as the armed forces, the FAA, border security etc. Thus, clients come to the clinic from all across the US to take these tests. Testing is free to UNR students, faculty, and staff, and a nominal fee is charged to others. Fees collected from the clinic are placed into an account for CBS graduate student travel.

Northern Nevada Optometric Association Drs. Crognale and Webster conducted a lecture series to provide local optometrists with information about advances in vision research, about research being conducted at UNR, and to foster collaborative research where interests of the optometrists overlap those of our faculty. These lectures were presented at the Fleischman planetarium and included a catered reception at the perception exhibit described above. Optometrists also received continuing education credits for these lectures. The lectures were received enthusiastically.

As part of the program's outreach efforts, Dr. Crognale teaches a course to the Aerospace Lighting Institute (an industry consortium) each summer on light, color, and vision. Attendees of this course include engineers from Boeing, Lockheed-Martin, Kopf glass, Honeywell avionics and most of the major government and aviation industry contractors for aviation lighting, avionics, and instrumentation.

CBS faculty also frequently give invited lectures in both academic and non-academic settings, at national, and international venues. These venues include scientific meeting at other universities, public talks at aviation conventions, aircraft type club meetings, and public grade schools.

CBS faculty have played a central role in establishment and maintaining of a local chapter of the Society for Neurosciences. This Chapter (Sierra Nevada Chapter of the Society for Neuroscience) was established in 2008 through the efforts of Dr. Chris Von Bartheld and others. Dr. Crognale served as a board member since the founding and as President of the Chapter from 2012 until 2015. The Chapter has received funds for outreach activities surrounding Brain Awareness Week and also to host an annual research conference. All of the CBS faculty have participated in the annual research symposium and many have served as board members.

Clinical Outreach

The centerpiece of the clinical program's community outreach is our psychological service clinic. The Psychological Services Center (PSC) at the University of Nevada, Reno utilizes the clinical and research expertise of Clinical Psychology Program faculty to provide an array of treatment options to persons living in Northern Nevada who experience anxiety disorders, depressive disorders, personality disorders, relationship problems, and substance abuse disorders. The PSC has been in existence for over 35 years and annually serves nearly 200 clients from Northern Nevada at its UNR location, with sub-clinics providing off-site services to clients in Carson City, Elko, Fallon, Lovelock, Spring Valley, and Winnemucca. As a sliding fee Center, the PSC is committed to providing affordable services to clients from all socioeconomic backgrounds. As such, the PSC serves as a much used community resource for individuals who cannot afford regular practice rates. No client is turned away from the PSC based on ability to pay. Ninety percent of clients served through the PSC are eligible for some level of fee reduction, with 48% of PSC clients receiving services at a reduced fee and an additional 42% receiving services free of cost.

To reduce the cost of services to members of the Northern Nevada community, faculty members in the Clinical Psychology Training Program routinely seek federal research support, with federal funds used to support treatment for victims of sexual assault, child sexual abuse, domestic violence, elder abuse, polysubstance abuse, and borderline personality disorder. The current and recent history of the PSC is noteworthy for the receipt of any number of federally-funded service grants. To ensure ready access to psychological services for crime victims in the Northern Nevada area, Dr. William O'Donohue secured VOCA funding for the establishment of the Victims of Crime Treatment Center at UNR. Established in 1997, the Victims of Crime Treatment Center has provided free psychological services to child victims of sexual abuse, adult survivors of child sexual abuse, and rape victims for the past nine years. In 2000, services available through the VOCA-funded Victims of Crime Treatment Center were expanded to include individual and group therapy for victims of domestic violence (administered under the direction of Dr. Alan Fruzzetti) and therapy for victims of elder abuse and neglect (administered under the direction of Dr. Jane Fisher).

Dr. Fruzzetti currently has a grant entitled: "Depression and Family Functioning" from the University of Nevada, Reno. Dr. Fruzzetti also has secured a STOP grant for treating Domestic Violence (DV) victims which is used to help fund the DV group treatment program. The breadth and quality of the clinical faculty allows us to be in an ideal position to interact with consultants for dealing with a wide variety of problems with which victims may present. Clinical faculty member Dr. Steven C. Hayes, with Dr. Jacque Pistorello in Counseling Services, has received a 5 year \$2.8M grant from the National Institute on Mental Health to test the impact of acceptance and mindfulness in the prevention of mental and behavioral health problems in entering college students. In the grant the ability of a measure of psychological flexibility to predict academic and health problems will be examined in nearly 3,000 students over four years, and the preventive impact of classes designed to alter coping strategies or to train better psychological flexibility will be examined in about 700 students who will then be followed during their time at the University.

The Psychological Service Center is HIPPA compliant and has been HIPPA certified, thus ensuring the utmost protection of client confidentiality. PSC staff work in collaboration with other UNR-based centers and clinics as well as agencies representing Northern Nevada to ensure service delivery to the largest number of Nevadans. Because of its University affiliation, the PSC is uniquely positioned to access and utilize resources, outside of Psychology, to comprehensively address difficulties faced by PSC clients. PSC staff members have access to and routinely consult with Medical School faculty and UNR and legal council. Because the financial model under which the Center operates, the PSC is an affordable referral resource for numerous community agencies including: Big Brothers and Big Sisters Association; Bristlecone Family Resources; Child Protective Services – Carson and Reno; Child Protective Services/Foster Care Services – Fallon; Children’s Behavioral Services; Children’s Cabinet; the Crisis Call Center; Elder Protective Services; the Reno Police Department Victims Advocate Program; The Rape Crisis Center; the Senior Center; Step Two; the Washoe Medical Center Life Skills Program; and WCC Saints/Washoe Medical Center Sexual Abuse Clinic.

Additional Community Outreach *in brief*:

Clinical

Alzheimer’s Association: Dr. Fisher provides technical and applied consultation to this organization.

CASA (Court Appointed Special Advocates): Dr. Fruzzetti consultation.

Elder Rights Unit (Nevada): Dr. Fisher consultation.

Lifespan Respite Coalition: Dr. Fisher consults
In addition, Dr. Fisher is collaborating with colleagues in Psychiatry, Internal Medicine, the Lou Ruvo Brain Institute, Nursing, and Social Work.

Long Term Care Office and Bureau of Licensure and Certification: Dr. Fisher, Ombudsman.

Nevada State Psychological Association: Dr. V. Follette is actively involved with this group of service providers.

Northern Nevada Adult Mental Health Services: Dr. Fruzzetti does consultation for this state supported in patient unit.

Reno City Attorney’s Office: Dr. Fruzzetti does consultation related to domestic violence.

Victims of Crime Act: State pass through of NIJ funds to provide treatment to child and adult victims. Drs. O’Donohue, Fruzzetti and Fisher supervise.

Washoe County Social Services: Drs. Fruzzetti and Ghezzi provide consultation

Behavior Analysis

Cambridge Center for Behavioral Safety Programs: Dr. Ramona Houmanfar has been and active members of this center.

Early Childhood Autism Program: Dr. Pat Ghezzi maintains this intensive, in home, early intervention behavioral development service for 8-10 families at any one time. Originally based on a Lovaas replication model of behavioral intervention, this program represents the only service of its kind in Nevada for 15 years

High Sierra Autism. Dr. Larry Williams has partnered with this large service provider to provide a parent training series with in home consultation, and a child service need assessment for revolving cohorts of 5 families over 3 month periods. The program intends to be preventive for developmental delays and development of significant behavior issues for families that presently have no other services.

Northern Nevada Service Providers Cooperative: Dr. Houmanfar consults with this organization.

Person Centered Assessment Training and Habilitation: A state funded program that provides services to adults with individuals with pervasive intellectual support needs under the direction of Dr. Larry Williams. This clinical day program provides behavioral and learning assessments and interventions for severe behavior disorders for 15 years, and has become the essential service for the state in Northern Nevada Developmental Services

Behavioral Consultation and Education Services: This state funded project provides behavioral consultation and staff training to service providers in Northern Nevada. It has developed a management model for agencies to assess and intervene on behavioral issues that is now being applied to all consumers in two large agencies under direction of Dr. Larry Williams.

Organizational Behavior Management and Educational Services: Dr. Ramona Houmanfar has provides a variety of organizational consultation services to cooperate groups (e.g., Microsoft, Schlumberger) and University of Nevada School of Medicine (curriculum design and leadership training) over the last five to seven years.

Reno Parks, Recreation and Community Services: Dr. Ghezzi provides training and consultation.

Washoe County School District: Dr. Ghezzi provides consultation to regular and special education students.

Faculty Objectives

Our objectives have centered on achieving national and international recognition at the professional level and meeting enrollment demands and responsibilities to our students that have increased dramatically over the past several years. The national and international reputation of a department is driven by the quality and impact of published journal articles and books by its faculty. In our view, the data presented demonstrate that our faculty are outstanding in meeting all of the objectives listed:

- are excellent teachers
- have potential for developing programs of research that will be competitive for external funding and visible for attracting graduate students
- participate in professional activities and contribute at regional, national, and international levels in leadership and service roles
- have a positive impact on the discipline and community
- serve as excellent ambassadors for the university and respected role models for our students
- are good citizens of the department, college, and university

IV.3 Analysis

It is useful at this time to examine the following statement from the 2008 program Review”

As we look ahead, Psychology faces some very difficult choices. We are committed to the goals and objectives of the institution; however the faculty resources have been stretched to the breaking point. As is evident from the data, our faculty are extremely active in teaching, research, and service. However, many of our faculty have gone beyond reasonable work load expectations and this burden cannot continue without significant damage to faculty morale. Faculty are aware that some of the problems are based on NSHE's success in obtaining resources for the entire system. However, given that one could reasonably predict limited resources for the next several years, it is imperative that there be appropriate distribution of resources to departments such as Psychology, who have produced far above and beyond what is typical in the university. If Psychology were to continue to be underfunded there is certainly a risk of losing our most prestigious faculty to institutions where resources are more competitive.

Since this last review the University continued to experience difficult financial times with the loss of many faculty positions (Psychology was fortunately spared significant faculty layoffs) and only recently has emerged with plans for expansion. Consequently, these recommendations went largely unheeded until the time of this current program review. In addition, faculty wages stagnated with the loss of COLA and merit pay increases and have not risen appreciably since that time, leaving faculty morale at a very low level. Nonetheless, Psychology has persevered and even managed to increase faculty workload to handle increased enrollment. These achievements are outlined below. Recently, the university has begun to add faculty and Psychology is among those groups targeted for faculty growth. In addition, merit pay increases

and COLA have slowly begun to reemerge. The next program review period will determine if the university has committed to growth and improvement in Psychology.

Psychology faculty can take pride in the national and international reputation of the department. We have a productive faculty in terms of publications and external grant support, and one that has not lost sight of the important responsibility of providing classroom instruction and direct learning experiences for students at both the graduate and undergraduate level. Several faculty members hold or have held important offices in national and regional associations, play a role in managing important conferences, assist in the editorial process for leading journals in the field, and participate in the grant review process. Our undergraduates have moved on to competitive graduate programs (e.g., Dartmouth College, University of California, Berkeley, Carnegie-Mellon University, Indiana University) and our Ph.D.s have taken teaching and/or research positions at leading universities (e.g., Brown University, Duke, University of Chicago, Iowa State, McGill, University of California, Davis and San Diego, University of Colorado, Denver, University of Nevada, Las Vegas, Western Washington, Willamette).

There continues to be substantial growth in the department in terms of number of majors and annual enrollments. Our annualized student FTE continues to grow as university enrollments increase. We have only been able to stay within striking distance of meeting student demand for courses by using a web-based approach in teaching the large enrollment PSY 101 classes, by receiving college contingency funds to hire LOAs, and by getting extra classes taught by faculty on soft-money contracts. Undergraduate students are being turned away because classes are “full;” some required courses cannot be offered as often as they need to be; and proper individual supervision for some direct-learning experience classes are compromised by enrollments that are too large. In general, more faculty are needed simply to meet student demand and enable undergraduates to fulfill graduation requirements in four years from the date of matriculation. Additional programmatic goals and objectives add to this need. These goals are to:

- Continue to develop the undergraduate curriculum to meet enrollment demands, to keep pace with new developments in technology, and to adapt to a changing and expanding knowledge base in the field.
- Broaden and Enhance Graduate Programs: Needs for additional faculty positions are justified on one or more of the following grounds:
 - To secure a respectable breadth of specialty area coverage.
 - To develop regionally and nationally recognized centers of specialization in areas of departmental focus and strength.
 - To establish and grow a faculty “critical mass” to provide credible representation of important topic areas defining degree programs.
 - To maintain expert representation across new and expanding areas.
 - To fulfill program requirements for course instruction and program supervision.

Part IV B- Faculty Satellite Behavior Analysis program

IV.Ib Faculty Compensation and Workload

Members of academic/research institutions' faculties, as well as qualified members of the professional behavior analytic community, are employed to teach courses in their areas of specialization and/or to serve as research mentors for individual students. Practical training supervisors are UNR doctoral students with BCBA credentials.

Course Instructors

Mark Alavosius, Ph. D, University of Nevada, Reno
 Mitch Fryling, Ph. D., BCBA-D, California State University, LA
 Patrick M. Ghezzi, Ph.D., BCBA-D, University of Nevada, Reno
 Linda J. Hayes, Ph.D., University of Nevada, Reno
 Cristin Johnston, Ph. D, BCBA-D, Castro Valley School District, CA
 Michael Johnston, Ph. D., BCBA-D, Castro Valley School District, CA
 William Potter, Ph. D., BCBA, California State University, Stanislaus
 W. Lawrence Williams, Ph.D., BCBA-D, University of Nevada, Reno
 Kimberley Zonneveld, Ph. D., BCBA-D, Brock University, Canada
 Zachary Morford, Ph. D., BCBA-D, University of Vermont
 Deric Toney, MA, BCBA, University of Nevada, Reno

Research Mentors

Mitch Fryling, Ph. D., BCBA-D, California State University, LA
 Michele Wallace, Ph. D., BCBA-D, California State University, LA
 Betsy Swope, Ph. D., West Chester University
 Diana Delgado, Ph. D., Konrad Lorenz University, Colombia
 Jennifer Bonow, Ph. D., BCBA-D, Mosaic Rehabilitation Inc.
 Jordan Bonow, Ph. D., Veterans Administration
 Maria Munoz Blanco, Ph. D., University of Guadalajara, Mexico

Practical Training Supervisors

Timothy Fuller, MA, BCBA, University of Nevada, Reno
 Matthew Lewon, MA, BCBA, University of Nevada, Reno
 Zachary Morford, Ph.D, BCBA-D, University of Nevada, Reno
 Deric Toney, MA, BCBA, University of Nevada Reno
 Jovonnie Leal, MA, BCBA, University of Nevada, Reno
 Sue Ke, MA, BCBA, University of Nevada, Reno
 Ainsley Lewon, BCBA, University of Nevada, Reno
 Christina Lydon, University of Nevada, Reno
 Christina Peters, MA, BCBA, University of Nevada, Reno
 Christy Coffman, MA, BCBA, Advanced Child Behavior Solutions, NV
 Sarah Ritchling, MA, BCBA, University of Nevada, Reno

Molly Luke, Ph.D., BCBA-D, Behavior Analysis Certification Board

UNR faculty members receive overload compensation for teaching courses in the Satellite Programs. External members of the Satellite Program instructors and research mentors receive LOAs for their contributions. Practical training instructors are engaged with graduate assistantships. Travel, housing and per diem, where applicable, is provided by the sponsoring agency.

IV.2b Research, Scholarship, Creative Activity, Outreach & Professional Service- Behavior Analysis Satellite Program

The measures of research, scholarship, outreach and professional service for the UNR faculty members participating in the Satellite Programs are provided in the context of the Behavior Analysis Program section of the Department's self-study. These measures for external faculty are provided in their curriculum vitae, which are contained in an attached CD.

Part V: Program Resources, Physical Plant, and Facilities

Describe the funding sources (state, grants/contracts, endowments, etc.) available to support the program activities.

Describe the physical facilities, including information technology, and support services used by the program. Describe changes that have taken place during the past seven years.

Funding

The base budget for the Department of Psychology during this review period is shown in Figure V.1. and averaged about 2.8 million. The great majority of this is personnel funding. Salaries, benefits, stipends, classified lines and state funded teaching assistantships are included in this figure. The department has an operating budget of about \$51,000 per year. Operating funds cover all office supplies, copier and phone charges, and mailing. Additionally, the department has paid for technical upgrades for seminar rooms, an alumni newsletter, search costs, and LOA funding out of the operating budget. The department also has an F & A account that is used to support active research and related initiatives. State budgeting policy is very restrictive in moving funds, making budget planning and tracking an important priority for the Chair. The base budget covers only a portion of our personnel funding. Each year we develop a request for instructional funding that is submitted to the Dean. Our request has ranged from \$24,000 to \$63,000 annually to cover LOA costs and our undergraduate advisor position.

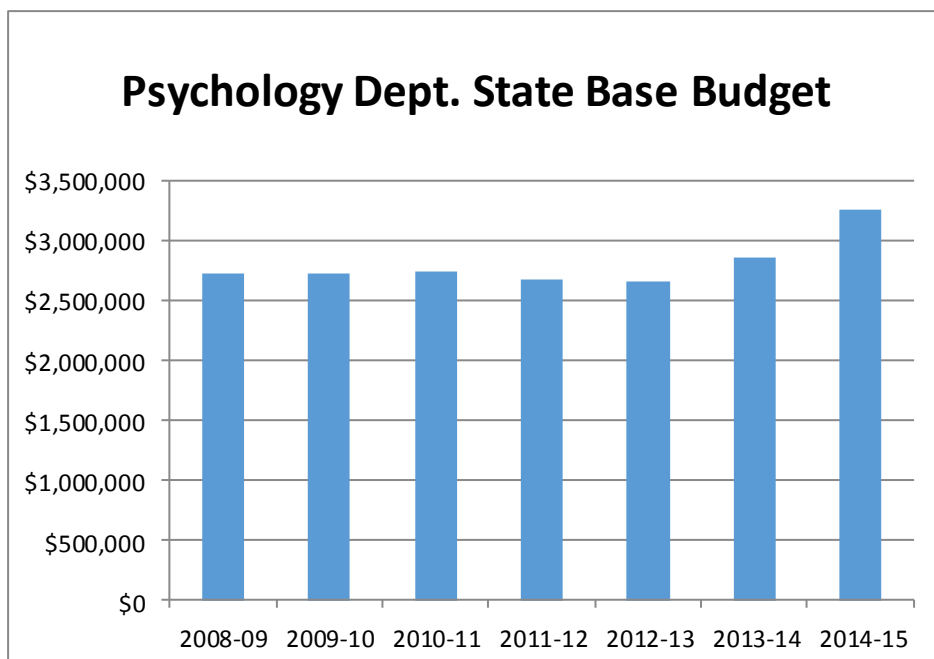


Figure V.1 Psychology State Base Budget

Teaching Assistants

Funding for state funded teaching assistantships has increased since our last program review. At the end of the last review period (2008) the funding was approximately \$14,000 for nine months and included health insurance and tuition coverage. Currently, students are paid \$17,000 for nine months and also have health insurance and tuition coverage. While this is certainly an improvement, our stipends are barely competitive with comparable institutions and this has led to some difficulties in recruitment. Support for TAs from the University varies from year to year. As of Spring of 2015, Psychology was allocated support for 450 hours/week of TA support, which translates to 22.5 20-hour/week positions. The TA assignments can be either 10 or 20 hour per week, depending upon the demands of the class. This Spring 2015 number reflects an increase of 5 positions from 17.5 20-hour positions in 2008. Unfortunately these gains have been outstripped by our undergraduate enrollment growth and the department remains understaffed with TAs to cover our teaching needs.

Part Time Instructors

LOA instructors currently are paid \$2700 for a three credit course. The department adds to this funding in order to offer \$3000 for regular undergraduate courses. For our lecture section of Psychology 101, we pay the instructor \$5000 because of the large class size and the need for the instructor to supervise three graduate students and several lab sections. Obviously these positions are grossly underfunded. The individuals who teach in these positions are generally doing this work as a service to the university and the students. Psychology is in a difficult position with regard to LOAs. While we have worked hard not to be overly reliant on outside instructors for offering our curriculum, as the number of undergraduates continues to increase we are finding it

very difficult to offer a sufficient number of sections to meet student demand. Both the rate of pay and the ability to offer sufficient courses is a university wide issue at this time.

Grants

The Psychology Departments has been very successful in obtaining grant funding from external sources. This grant activity has been discussed above in the Faculty section. These grants have brought in approximately \$1.47 million dollars to the University in F&A funds in 2015 alone. Approximately \$37,000 of that was returned to the Department as part of the budget for 2015.

Endowments

The Department of Psychology has a number of endowments and funds from private sources. These are primarily from donors who are expressing appreciation for the importance of our program and research. These funds have different requirements for spending laid out in the individual agreements. The current balances for these accounts are tabled below.

BEHAVIORAL ANALYSIS PROGRAM	\$25.00
MORAN FAMILY TRUST IN PSYCH	\$3,815.47
JIM MIKAWA GRADUATE ASSISTANTS	\$49,289.17
NEVADA CARE GIVER SUPPORT	\$173.47
SUICIDE PREVENTION SERVICES	\$9,060.56
PSYCHOLOGY GIFTS	\$6,323.44
EARLY CHILDHOOD AUTISM PROGRAM	\$5,010.00
DR. HESS ENDOWED IN PSYCHOLOGY	\$1,640.49
PSYCHOLOGY STUDENT TRAVEL	\$405.00
S HAYES RESEARCH & CONF FUND	\$619.36
MCCREYNOLDS LECTURE SERIES	\$55,462.32
Total	\$131,824.28

Balance and funds in endowed accounts for the department of psychology as of 2015.

Physical Facilities

The space available to the department and the clinical psychology program has not been adequate over the years. Space in the psychology building (Mack Social Science, which is shared by other departments) has been cannibalized to provide office, research, and other space as the department as expanded to the detriment of other uses such as classrooms and offices for graduate students. Some faculty have been assigned research space in other buildings, which in themselves have been subdivided as we have grown or gotten grants and contracts. As a result, labs are quite small. This is exacerbated by the fact that graduate students (and graduate teaching assistants) have no offices, so they have to find space in labs, which functionally makes the labs smaller.

The physical environment for the department at the University of Nevada has contributed to a fragmented appearance. Psychology currently occupies most of the top two floors of the Mack Social Science building, with the Clinical program operating primarily out of the 3rd floor and the Cognitive Brain Science and Behavior Analysis programs located on the 4th floor. However, Behavior Analysis faculty also has space assigned off campus at the Nelson building and has utilized space in the past at the Applied Research Facility. One faculty member in clinical psychology is located in Cain Hall, where the psychology laboratory for Psy 101 (as well as for other undergraduate and graduate courses) is also located. A clinical faculty member now has space at the medical school in order to provide services for her gerontology related programs. Some Behavior Analysis programs are housed in space on the grounds of the Nevada Mental Health Institute. Recently we have had to make several difficult space reassignments. In order to provide adequate space for a new faculty in CBS, a senior faculty member was asked to give up half of his lab space. Another faculty member is providing temporary office space in his lab for a new hire in CBS. Additionally, one CBS faculty member has a “wet lab” in the Applied Research Facility, which is some distance from the department. The Large COBRE grant acquired by Mike Webster in CBS also has unmet space needs that were promised as part of grant support, including rooms for equipment and administration.

Historically, one of our most significant space problems is related to the applied services component of our mission. Behavior Analysis and clinical psychology had been significantly under resourced in this area. The result has been to find space away from the department. The current space for the training clinic for clinical psychology, the Psychological Service Center, was the former Writing Center in Cain Hall. To serve the 200-300 people provided services as a part of student’s clinical training, there are three rooms for individual psychotherapy and one group therapy room as well. In addition, there is a space for the clinic Graduate Assistant, storage of protected health information, and a room for treatment team supervision meetings and training. However, much of this large space was set up for group instruction. With the spaces notes above all facing a large room that constitutes about 40% of the space, a corner of which is used for patients to wait and another for the administrative assistant to sit. This situation is not ideal as the admin assistant often works with protected health information. Further, the clinic rooms are not soundproofed and confidentiality of sessions is a concern. A particular problem with this space is that the four parking spaces rented by the Clinical Psychology Program from the University for patients is not in the Cain Hall parking lot but instead in the Brian Whalen Garage, a long walk including a set of stairs or a long, steep ramp, making it virtually impossible to provide services to those with disabilities in our training clinic. This has been a particular problem for several of our faculty given their programs of research in treatment of geriatric populations and those that have disabilities from traumatic injury.

Psychology had been targeted for space expansion, and previous strategic plans had assumed that the physical location for faculty laboratories and offices would be consolidated so that by 2007 or 2008 psychology will be housed under one roof; presumably a much larger roof based on increasing the current department space allocation by a factor of 1.5. However, some of this planning was dependent on space opening in the building that was formerly the Getchell Library. Changes in funding and priorities have taken that option off the table at this time. Thus, it is essential that we work to find adequate space for both new grants and client services in the

Behavior Analysis and clinical programs. With new building construction under way we have been working with the University and CLA to address the space issues once again. There is currently a plan to reallocate space that should largely meet Psychology's needs (see Future Plans below).

MRI Facilities- During the last review period, the Department and CBS in particular was pushing hard for a Magnetic Resonance Imaging (MRI) center to conduct cutting-edge functional brain research. The initial costs for the equipment were high but finding appropriate space and funding for maintenance costs were even more prohibitive. More recently, with the success of the COBRE grant and the establishment of the Interdisciplinary Neuroscience programs this push for MRI capabilities has resulted in a collaboration between Renown Hospital and UNR. Currently, many of the CBS faculty are utilizing these resources through the COBRE support and other external grants. This collaboration represents a functional and reasonable alternative to housing a new facility at UNR. However, it is likely that with increased usage and future hires in the area of Human Neuroscience that researchers here at UNR will pursue a campus based MRI facility again in the future.

Classified Support

During most of the review period, the department had 2.0 classified positions with primary responsibility for departmental administration and instructional support. However, the increasing number of responsibilities that fell to classified personnel in a department with both a large graduate and undergraduate enrollment strained the system. Our staff were responsible for contracts for LOAs and provide active support to programs that receive external funding in addition to management of TA contracts. This workload has increased significantly as we grew in both number of faculty and students, as well as the increased administrative responsibilities. Our faculty have been successful in obtaining outside funding and many of these grants include indirect funds. However, with increased requirements for grant monitoring, compliance forms, and other supports services to grants, we were simply not sufficiently staffed to manage the workload. The lack of adequate support staff often results in faculty performing basic office tasks. In 2013 the University allowed us to hire an additional 0.5 Administrative Assistant to help with these problems.

Classified Staff

Psychology Department

AAIV (Office Manager) J. Prager
Hired 2000; Upgraded from AAIII 2004
AAII (Front Office) A. McLachlan
Hired 2005; Upgraded from AAI 2006
AAII (Front Office) M. Wadsworth
Hired 2013

Psychological Services Center

AAIII (Clinical Program Coordinator .75) K. Larson
 Hired 2005
 AAIL (PSC office; .53) D. Shirey
 Hired 1993; Upgraded from AA1 2006, Retired 2010
 M. Wadsworth
 Hired 2013

Behavior Analysis (Non-stated funded positions)

Account Tech. I S. Cobb-Adams
 Hired 2008, terminated 2009, position reclassified to AAIL
 AAIL (Satellite Program) J. Baker
 Hired 2008

Grant Support

A particular vulnerability for the department is the lack of adequate grant infrastructure support. The Office of Sponsored Projects is significantly underfunded, and therefore grant management falls primarily to the department. We have to do budget management, personnel forms, effort reporting forms, and monitor a number of related activities. At times, PIs themselves are addressing the most basic types of grant hiring and reporting activities. This not only detracts from the efforts on current grants but also from the ability to identify new funding sources and develop new grant applications. Having a program officer who is dedicated to these duties and could also assist with managing relationships with grant organizations, participate in the development of new grant initiatives and serve as a point person on various grant related tasks would have an important positive impact on our ability to maintain and pursue outside funding.

Assessment/Advisement

Tracking undergraduate majors and providing valid measures of educational processes and outcomes is much more difficult, and an area in which the Psychology department continues to improve. A simple count of the number of psychology majors provides one limited measure of success. However, the sheer number of our majors can be intimidating for this enterprise and can force much of the assessment to an impersonal level. A new hire of an advisor/lecturer has greatly helped in this. There is also a plan to hire an additional faculty member to assist in these roles. The department has an approved assessment plan on file, with implementation at varying stages of development. Course approval (student evaluations) figures prominently in this activity, as does “before-after” learning gain scores for some courses. The university assessment office has assessed the department’s two delivery options for the large enrollment introductory class (PSY 101). Our PSI CHI undergraduate honor society has conducting exit-interviews with questionnaires administered to graduating seniors by the department undergraduate advisors. In addition to questionnaire data, some undergraduates work closely with individual faculty, and it is possible to collect data relevant for addressing educational success in terms of number of undergraduates who co-author conference presentations and publications, and reporting outcomes for those who request letters of recommendation for employment or for admission to

graduate or professional schools. Accountability and assessment concerning our undergraduate majors is an area of responsibility that we have greatly improved.

Virtual Resources

The department recognizes that the internet has become the primary medium for student recruitment and education, for disseminating research and publications, and for maintaining contact with alumni and the field. The department web site includes substantial information on undergraduate and graduate programs, admission criteria, and degree requirements. It also includes faculty profiles and links to faculty home pages. However, what is lacking is a more dynamic platform that provides frequent updates on faculty and student accomplishments and events such as colloquia or conferences, as well as research and educational opportunities for current and prospective students. There is also a need to keep faculty profiles up to date with publication and funding information. Such web page developments are crucial for properly identifying and fully advertising the many strengths of the department to potential students and to the broader academic community, and would also serve as a useful vehicle for communication about current events and programs within the department and campus. Accordingly it is important to identify appropriate staff who can dedicate sufficient time to developing and actively maintaining and updating departmental web resources.

Satellite Program in Behavior Analysis

The Satellite Programs' resources are provided by sponsoring agencies under services agreements with the University. The program occupies a small space in the laboratory of the Satellite Program Director. Filming of the online lectures takes place in a departmental conference space over the course of several weekend dates each semester.

Part VI: Future Plans

1. Strengthen and enhance our undergraduate and graduate educational programs in direct connection to our scholarly mission.

Undergraduate Education

The Department plans has conducted a comprehensive evaluation and strategic redesign of its undergraduate curriculum. Our core idea is to build out from our strengths. Already we have a direct learning requirement for our undergraduates that creates applied placements or research externships for students. We plan to continue in this vein in all areas of our curriculum. We currently serve three primary groups of undergraduate majors-1) those seeking a more general liberal arts foundational degree, 2) those who intend to pursue graduate education in psychology or a related field and 3) those who plan to seek a career in the applied behavioral analysis field. Our contact with students occurs not only in the classroom but also in more informal settings. We do a great deal of mentoring, advising, and supervision of our undergraduate fields in their research and applied work with faculty.

Our strategies for achieving undergraduate goals include:

- Secure faculty lines in proportion to the funding formula, at least as actually implemented on campus
- Continue Self-Paced Personalized System of Instruction for Psychology 101
 - The introductory psychology course (PSY 101) meets needs for social science requirements for students from across the university. While there are other options for meeting this requirement for non-majors, it remains the case that many undergraduates prefer the psychology option. The Self-Paced, Personalized, Interactive, Networked (SPIN) System of Instruction for PSY 101 provided instruction to approximately 600 undergraduate students per semester (over 12000 students) for the last 10 years. This highly successful instructional program contributes significantly to the mission and productivity of the Psychology Department for the last 21 years. The course is run out of a Learning Lab (253, EJCH) on the university campus. We plan to maintain the success of SPIN by supporting the associated instructional support. Moreover, as part the space transition from EJCH, we plan to secure a space in MSS building to support the daily operations of this system of instruction.
- Continue Psychology 101 Lecture/lab course option
 - Assessment of our first offering of this course showed favorable ratings
 - Develop and offer an online version of this course to accommodate the demand caused by ever increasing enrollment in the university.
- Provide honors sections of courses
 - We have added Introductory (PSY 101) sections effective Fall 2008
 - Continue support of our revived Psychology Honors club
- Increase offering of PSY 301 to twice a year
 - This course is required and regularly has more students attempting to enroll than can be accommodated
- Do more undergraduate mentoring and training through direct learning strategies and implement assessment of these programs
- Increase the number of capstone courses offered.
- Continued improvement and expansion of our advising program

2. To continue to enhance our national prominence as a research center that contributes to basic and applied science in a manner consistent with the social responsibilities that flow from being part of a land grant institution

One of the characteristic properties of the department is its relatively pragmatic and real world orientation to research, even in the basic domain. We take seriously our responsibility to link our research efforts to the needs of our society and the citizens of this state. This provides unique opportunities for us, in the areas of funding, the development of research programs that will advance our outreach and add to our educational integration with our research mission.

Our strategies for achieving this goal include:

- Continued support of targeted programs of known need (e.g., autism, the elderly, psychotherapy development, integrated behavioral health care, violence treatment and prevention, substance abuse, and others).
- Increase our grants and contracts by developing research collaborations and larger funded teams of researchers
- Plan the development of new space that meets community based research needs
- Increase our citations and research impact by continuing to hire excellent faculty, and by the development of lines of research with multiple investigators and good program integration

3. To link our educational and research expertise to outreach programs that enhance the behavioral health and well-being of the citizens of our state. These programs will serve as national and international models.

Our strategies for achieving this goal include:

- Development of funded training options linked to developing areas of expertise
- Continued development and professionalization of our various clinical services
- Obtaining additional external funding to support outreach
- Examining the need for the development of a 5-year Master's program
- Location of outreach and research programs within our primary space

4. Increase faculty involvement in university wide interdisciplinary activities

Our strategies for achieving this goal include:

- Development of targeted outreach to university programs that currently have significant overlap with our areas of expertise
- Increase our grants and contracts by developing research collaborations and larger funded teams of researchers
- Increased involvement of faculty in university and college planning committees and task forces
- Explore ways to enhance existing relationships with groups such as Gerontology, Health Sciences including the Medical School, Social Psychology and Athletics

Department Funding Priorities

There are differing opinions on the rank ordering of the following priorities. At this point, they will be presented in an unranked list, with an explanation of the rationale for the specific needs.

New Faculty

Additional Lecturer/Advisor-This position has been approved and a search is ongoing.

The department continues to grow in terms of both majors and minors. As noted in our data, we are greatly underfunded in our teaching mission. An additional Lecturer/advisor will be tasked with several duties that are essential to the department. First, we would supplement our currently overworked Advisor/Lecturer and graduate student advisor position and provide additional

advising in the major. Faculty are much more useful in mentoring students in research and applied activities as well as more general educational guidance. The sheer number of undergraduates in our department makes basic advising support by a designated advisor essential to providing high quality, timely advising. This individual would also be responsible for oversight of the assessment of our undergraduate majors. Finally, we would look for an individual who could teach undergraduate courses that we currently are not able to cover on a regular basis. One area of particular need is to develop an online option for Psychology 101 in order to meet the increased demand for this course. The goal of hiring in this position is to maintain our ability to provide a high quality undergraduate program in a time of increased enrollments without detracting from our research mission. Our need to stabilize the research and teaching in our graduate programs, made hiring in tenure track lines a great priority.

Quantitative Psychologist-Social Psychology Faculty Replacement- Approved

Behavioral science research makes use of complex statistics and research designs. While not all programs use such designs, psychology has a long tradition of statistical and methodological innovation that provides identity to the field. It is imperative that the psychology department have at least one quantitative psychologist who has a major area of specialization. The need for this position is more critical because of the loss of several key statistical collaborators who were housed in other departments. The programs that make the most use of such complex designs are social, clinical and experimental psychology. These skills are fundamental for research designs where longitudinal research occurs. Examples in our department that currently make use of these types of analyses are treatment outcome research, aging research, developmental or life-span research, group research, and aptitude x treatment research designs or applications of modern computational techniques such as neural network architecture or independent components analysis. Our teaching in this area has been a regular source of concern in our graduate student's ratings of their training. A social psychologist with an expertise in quantitative analysis filled this position in 2014. However this person left the University to take a job in industry. We are currently recruiting to hire a replacement with expertise in structural equation modeling, hierarchical linear modeling, and latent growth modeling.

Behavior Analysis- Need for additional positions

This year marks the 25th Anniversary of the Behavior Analysis Program at UNR. The Program were awarded the "Organizational Enduring Contribution to Behavior Analysis" by the Society for the Advancement of Behavior Analysis in May 2010. Our strength and established graduate curriculum and training in Behavior Analysis interdisciplinary collaborations with the College of Education, College of Engineering, and the School of Medicine over the decade. Moreover, these interdisciplinary alliances have led to multiple scholarly products (i.e., federal grants with DOD and Department of Education, series of publications and academic presentations). Our program is heavily invested in outreach, and thus we expect to take advantage of the many opportunities that exist in our community and state to cultivate new partnerships in human services, leadership training, organizational management, and education, to create new revenue streams, and to provide our students with formative, real-world experiences in behavior analysis.

Coupled with our recurrent offerings Psychology 101 (over 1300 students per academic year), the Behavior Analysis Program provides the highest amount of support for undergraduate teaching (including the ones targeting majors, minors, and fulfill Social Science requirement in Core) in the College of Liberal Arts. Moreover, the Department Undergraduate Track in Applied Behavior Analysis is in the final stage of approval by the University's Courses and Curriculum Committee. This expansion requires the full commitment of the current Behavior Analysis faculty, representing 6 FTE among 6 members, who are also responsible for the delivery of fully accredited Master's and Doctoral degree programs to over 50 graduate students pursuing their doctoral and masters training in Behavior Analysis. In that, we cannot conceivably deliver this sequence of courses, in addition to maintaining a high quality graduate training program, without additional faculty support. It is time for the behavior analysis program to broaden its mission by hiring additional expertise in areas of human service, community psychology, and large scale applications.

CBS-Neuroscience positions and space.

The CBS program is building a focus on cognitive neuroscience, an enormously broad and growing field that emphasizes biological structures and mechanisms that affect sensation, cognition and perception. This newly forming field has rapidly pushed the area of cognitive psychology into a much more biologically oriented program. In the last review period CBS has been particularly productive. The procurement of the COBRE grant allowed for the development of the Center for Integrative Neuroscience. While this grant brought in resources and funds for development, space allocation has still been an issue. The establishment of the undergraduate and graduate neuroscience programs has placed additional demands on the instructors to develop and teach new courses including labs. During the last review period CBS has expanded its cognitive neuroscience mission with addition of one new faculty line. This has been possible only by sacrificing space from established and productive labs. More recently the University has recognized the potential and importance of the CBS program in Neuroscience. Consequently, CBS has been promised four new hires over the next several years (2 to start in 2016, and 1 each in 2017 and 2018). Of course, this great success comes with growing pains and space allocation will be an issue (however, see Space Plans below).

Clinical Psychology-2 positions, 1 already approved

Clinical psychology is also a rapidly changing field. While the university has identified peer institutions, the clinical has long been a cutting-edge program. The clinical program has been a founding member of the Academy of Clinical Science since 1995. Other peer programs include those at Yale University, Indiana University, University of Washington, University of Southern California to name a few. This well-established program needs to continue its leadership role and not risk sacrificing its standing in the academic community. With the advent of the Affordable Care Act, the program has focused its attention on how Ph.D. level psychologists can maximize their value in an environment where integration into medical primary care systems rather than traditional one-on-one psychotherapy service delivery is the venue that most behavioral health services will be provided in the future. To adapt and thrive as a field after this sea change, Ph.D. level clinical psychologists will need to be trained as treatment designers, program administrators, program evaluators, public policy makers, and participants and designers of integrated behavioral health services in diverse medical settings such as primary care, and specialty clinics such as pain management, cancer treatment, etc. The uniting theme is that

clinical psychologists will need the skills to work across multiple levels ranging from basic behavioral research, research on treatment design and implementation, as well as program evaluation and administration. Our current faculty has expertise in basic research, treatment development, behavioral medicine, and integrated care. However, we need to add to the current strengths in basic behavioral research, treatment design/efficacy research, integrated care and behavioral medicine to maintain our national standing as the field changes. We also would benefit greatly from additional expertise in implementation research, program evaluation, pediatric behavioral health, and treating vulnerable populations. One position has been approved for hire. After an unsuccessful search in 2014, we are currently conducting a new search to fill this position.

Additional Resource Needs

Graduate Assistants: Additional graduate assistants are needed in order to accomplish two important department goals. In revising our curriculum we hope to make better use of faculty resources in providing larger lecture sections of courses with discussion/lab sections attached to those courses in order to provide the opportunity for small group learning and hands-on learning experiences. Our second need is to be able to enhance the ability of our graduate programs to attract high quality students. Full funding of graduate assistantships is essential to be competitive for the recruitment of the best graduate students. Additionally, as the size of our faculty increases a commensurate increase in graduate student positions is needed to help cover the expansion of our course offerings.

Space Plans

Given that prior plans to move the department to new and larger space were not able to be implemented, space has become a crucial issue in the department. Apparently this is a university-wide issue and new building construction has recently been underway. The University has recognized Psychology's needs and there are plans to provide expanded space within the Mack Social Science building as other departments vacate these areas for space in the new buildings. In particular, the current plan is for Psychology to ultimately occupy almost all of the Mack Social Science building except for centrally scheduled classrooms. There are also plans to continue to provide space outside campus to accommodate the autism treatment center, prevocational assessment, habilitation training program, and other special clinical needs. If this plan is seen to completion, it should minimize the space limitations placed on the department's planned expansion and greatly promote the future success of Psychology.

Grant Officer: As noted earlier in this report, a very real problem in the department is the lack of adequate grant infrastructure support. The Office of Sponsored Projects is significantly underfunded and cannot provide all of the services that we need. Many of these tasks fall to the department. We have to do budget management, personnel forms, effort reporting forms, and monitor a number of related activities. At times, PIs themselves are addressing the most basic types of grant hiring and reporting activities. This not only detracts from the efforts on current grants but also from the ability to identify new funding sources and develop new grant applications. Having a program officer who is dedicated to these duties and could also assist with managing relationships with grant organizations, participate in the development of new

grant initiatives and serve as a point person on various grant related tasks would have an important positive impact on our ability to maintain and pursue outside funding.

New Classified Positions

In the past review period, the department had 2.0 classified positions with primary responsibility for departmental administration and instructional support. However, the increasing number of responsibilities that fall to classified personnel in a department with both a large graduate and undergraduate enrollment have strained the system. Our staff are responsible for contracts for LOAs and provide active support to programs that receive external funding in addition to management of TA contracts. This workload will increase significantly as we grow in both number of faculty and students, as well as the increased administrative responsibilities. Our faculty have been successful in obtaining outside funding and many of these grants include indirect funds. However, with increased requirements for grant monitoring, compliance forms, and other supports services to grants, we were simply not sufficiently staffed to manage the workload. Our CBS program had almost no support for their graduate program and an additional position could assist with those tasks as well. In recognition of this state, the university has recently allowed us to upgrade our existing senior Administrative Assistant to a Program Officer and provided the department with an additional 0.5 administrative assistant position for the main office as well as a new administrative assistant position for CBS. The first position has been filled and the department is currently searching to fill the latter position.

In addition, the Behavior Analysis have long been partially self-supporting (faculty funding, graduate student funding, etc.) from grants and contracts, but now all positions are state-funded and have regular faculty teaching and research responsibilities. The revenue generating responsibilities of our faculty members have resulted in the generation of over a million dollars in grants and contracts on an annual basis. Currently .47 FTE of the budgetary support for our 1.0 FTE assistant is paid out of these grants and contracts. We believe the additional support will promote further stabilization of this critical role in our program and help us departure from the older model. This request fully mitigates this inequity by funding the additional .43 of this position as BA continues to increase faculty numbers and SFTE.

Satellite Program in Behavior Analysis

Since the inception of the Satellite Programs in Behavior Analysis, which was a unique enterprise 20 years ago, a number of other online programs in behavior analysis have been initiated in the United States. Plans for future development of UNR's program are centered on international opportunities. Efforts have been and continue to be made to develop additional programs in the countries of the Gulf Region. Other efforts are underway to develop badly needed services and training programs in India.

Appendix I
 2015 Program Plan
 Psychology – Bachelor's Degree
 College of Liberal Arts

Description of courses and student learning outcomes

PSY 101 - General Psychology

Presents psychology as a science concerned with the actions of organisms in a social and cultural context. (Credit may not be earned in both PSY 101 and PSY 103.)

Student Learning Outcomes:

1. Students will be able to apply the knowledge, perspectives, principles, and types of reasoning employed in psychology as a social science.
2. Students will be able to demonstrate how the knowledge, perspectives, principles, and types of reasoning utilized in psychology as a social science may contribute to learning and human development.
3. Student will be able to demonstrate learning skills that showcase integrative thinking and the ability to transfer knowledge and skills from one setting to another.

PSY 105 - Introduction to Neuroscience

An introduction to neuroscience and the role and impact of neural disease on society. BIOL 105.

Student Learning Outcomes:

1. Students will be able to demonstrate a basic understanding of neural function
2. Students will be able to articulate the general biological principles underlying neurodegenerative disease.
3. Students will be able to relate neural functions to societal issues including the cost, diagnosis and treatment of neurological disease.

PSY 205 - Elementary Analysis of Behavior

Survey of principles of reinforcement theory in the analysis of behavior. Principles of learning demonstrated in the laboratory. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to identify relations between an individual's behavior and environmental events in daily life.
2. Students will be able to articulate behavioral phenomena using the terminology of behavioral science.
3. Students will be able to compare, contrast, and evaluate different methods for measuring and changing behavior.
4. Students will be able to discuss ethical issues related to changing an individual's environment and behavior.

PSY 210 - Statistical Methods

Practice with statistical methods especially useful in the presentation and interpretation of psychological, sociological and educational data. Prereq(s): PSY 101; completion of University Core Curriculum Mathematics requirement.

Student Learning Outcomes:

1. Students will be able to identify, apply and interpret descriptive statistics.
2. Students will be able to identify, apply and interpret inferential statistics.
3. Students will be able to format, analyze and visually display data
4. Students will understand how to use statistics in research to describe data, summarize data and make decisions regarding experimental manipulations"

PSY 233 - Child Psychology

Psychological aspects in the development of children through preadolescence. Examination of behavioral, social, cognitive, affective and cultural factors. Theory and research on developmental stages. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to describe the physical, social, and emotional development of children.
2. Students will be able to articulate the processes responsible for changes in child behavior.
3. Students will be able to discuss the behavioral, social, cognitive, affective and cultural factors involved in child psychology."

PSY 240 - Introduction to Research Methods

Major techniques and problems encountered in both survey and experimental research in the behavioral sciences. (Formerly PSY 392; implemented Spring 2003.) Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to be prove themselves critical consumers of information by evaluating knowledge claims encountered in both the scientific and popular media.
2. Students will be able to identify and address common ethical issues in research with special emphasis on research with human subjects.
3. Students will be able to identify types of validity and reliability and their application to real world questions.
4. Students will be able to identify a range of methods of data collection, and understand their relative advantages/disadvantages.
5. Students will be able to address factors that determine common experimental designs, including how to identify dependent and independent variables.
6. Students will be able to explain the theory and rationale of hypothesis testing.

PSY 261 - Introduction to Social Psychology

Nature of the person and of interpersonal relationships, their formation and maintenance and their institutional, ideological and societal contexts; empirical examination of beliefs, attitudes, influence. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to explain research methods used by social psychologists: such as laboratory experiments, field experiments, surveys, observational or archival research and others.
2. Students will be able to explain major theories of social behavior offered by social psychologists: such as dissonance theory; theories of bystander intervention; dual process theories of thinking and persuasion; attachment theory; and others.

3. Students will be able to explain specific research methods and some individual studies testing these theories
4. Students will be able to explain how social psychological theories and research are used to study and understand important thinking and behavior in applied domains such as law, business, environment, health and others.

PSY 275 - Undergraduate Research

Independent or collaborative empirical research. Maximum of 6 credits. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to complete the steps involved in the scientific research process in psychology.
2. Students will be able to review the relevant literature by retrieving, reading, summarizing, and discussing particular information of interest to the research study.
3. Students will be able to generate worthy research questions as a result of understanding prior related research.
4. Students will be able to develop suitable methods of investigation appropriate to the confines of the research question, setting, variables, and participants.
5. Students will be able to prepare proposals for review by the University Human Subject Review Board.
6. Students will be able to collect and analyze data.
7. Students will be able to prepare reports for presentation and/or publication as outlined by the APA 6th Edition Publication Manual.
8. Students will be able to collaboratively work with others in a research lab.

PSY 299 - Special Topics

Suitable topic under the supervision of a staff member. Maximum of 5 credits. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to demonstrate knowledge of the special topic area of focus.
2. Students will show competency on a related topic of focus through written assignments and/or course presentations.

PSY 301 - Experimental Psychology

Lecture, plus field research on scientific methods in behavior and cognitive processes. Prereq(s): PSY 101; PSY 210 or STAT 152 or APST 270.

Student Learning Outcomes:

1. Students will be able to list and describe contemporary investigative techniques and their connection to science and problems of societal concern.
2. Students will be able to explain various ethical concerns in psychology research, especially those related to the modern research technology.
3. Students will be able to demonstrate an ability to execute all phases of the research process.

PSY 375 - Advanced Undergrad Research

Independent or collaborative empirical research. Maximum of 6 credits Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to complete the steps involved in the scientific research process in psychology.
2. Students will be able to review the relevant literature by retrieving, reading, summarizing, and discussing particular information of interest to the research study.
3. Students will be able to generate sound research questions as a result of evaluating prior related research.
4. Students will be able to develop suitable methods of investigation appropriate to the confines of the research question, setting, variables, and participants.
5. Students will be able to prepare proposals for review by the University Human Subject Review Board.
6. Students will be able to collect and analyze data.
7. Students will be able to prepare reports for presentation and/or publication as outlined by the APA 6th Edition Publication Manual.

PSY 395 - Ethics in Behavior Analysis

Ethical issues relevant to the practice of behavior analysis and the conduct of behavior analytic research with human participants. Prerequisite(s): PSY 101, PSY 240, PSY 205.

Student Learning Outcomes:

1. Students will be able to describe the historical circumstances giving rise to ethical guidelines for the practice of behavior analysis.
2. Students will be able to discuss current ethical guidelines for the practice of behavior analysis and evaluate how to behave in accord with those guidelines.
3. Students will be able to obtain and maintain IRB certification from the UNR Office of Human Research Protection.

PSY 403 - Physiological Psychology

Physiological mechanisms associated with reflex action, emotions, motor skills, thinking and language. Effects of drugs, internal secretions and neural lesions on behavior. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will recall the basics of human neural anatomy, neural function, and psychopharmacology.
2. Students will be able to recognize the basic mechanisms that provide for our behavioral capacities and behavioral pathologies.
3. Students will demonstrate the ability to compare and contrast current methods used in neuroscience research.

PSY 404 - Human Psychophysiology Lab

Laboratory course in human biopsychology techniques, introducing measures of neural function such as the EEG, EKG, autonomic and motor responses, and sensory evoked potentials.

Prereq(s): PSY 301; PSY 403.

Student Learning Outcomes:

1. Students will recall techniques used in human psychophysiology experiments.
2. Students will demonstrate the ability to write up lab reports for exercises and experiments done in class.

3. Students will apply the scientific process by writing an experimental proposal, conducting the experiment, analyzing data, and presenting the results to the class.

PSY 405 - Perception

Basic principles by which individuals perceive their environment. Topics can include the perception of form, color, space and depth. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to describe basic psychological and neural processes involved in perception
2. Students will demonstrate the ability to discuss and describe in writing the psychophysical and neural methods for studying the senses
3. Students will be able to solve basic problems related to how the senses work
4. Students will be able to discuss current theories of human perception

PSY 407 - Applied Behavior Analysis

Application of behavioral principles and techniques in the home, school, hospital and institution. Emphasis on motivational and learning procedures for use with problem behaviors in children and adults. (Formerly PSY 406/607; implemented Spring 2003.) Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to describe typical behavioral assessment and intervention methods used across various populations (e.g., developmental disabilities, Autism, adolescents, older adults), settings (e.g., human service, organizational), and professional disciplines (e.g., pediatrics, rehabilitation, clinical psychology, education).
2. Students will be able to provide examples of: operationally defined measurable behavioral performance in humans, observation and record methods used to track that performance in baseline and intervention phases, and behavior change outcomes and associated contingent environmental manipulations.
3. Students will be able to describe, in detail, current Applied Behavior Analytic applications and issues in the recent published literature related to an area of application.

PSY 408 - History of Psychology

Historical background of psychology from the Greek period to the present. Development of psychology as a science and advances during this century. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to discuss the global and historical themes that have contributed to the development of the field of contemporary psychology.
2. Students will be able to identify major psychological systems, their theories, the historical context in which they came to exist, and the individuals who contributed to their development through discussing the general progression of psychological thought and theory throughout history.
3. Students will be able to discuss the historical contributors to the current state of mental health treatment delivery.
4. Students will be able to effectively critique the role in which history plays in the development of psychological science.

5. Students will be able to demonstrate a level of comprehension of the various psychological systems in order to differentiate between and find commonalities across these systems.
6. Students will be able to demonstrate critical thinking skills through writing and informal class discussion. Using foundational knowledge acquired in the course students will apply the information to current events-providing the opportunity to transfer knowledge across settings.

PSY 410 - Philosophical Criticisms of Psychological Research

Review of criticisms of psychological research by philosophers in the tradition of ordinary language analysis. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to explain in written and oral communication how underlying philosophical methodologies interact with contemporary psychology by describing specific instances.
2. Students will be able to effectively critique psychological methodologies and explain their limits.
3. Students will be able to discuss the role of philosophical problems in psychological research.
4. Students will be able to engage in critical thinking regarding the role of psychology in philosophical problems.
5. Students will be able to, from a philosophical perspective, critically evaluate the APA ethical code. Take and defend a position in whether or not it is satisfactory.
6. Students will be able to demonstrate understanding of the role of historical contributors to present day views of philosophical psychology.

PSY 412 - Motivation and Emotion

Basic principles of motivation. Examination of major themes and contemporary research in the field. Application of motivational psychology to special areas, including educational and business. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to evaluate scientific and pre-scientific accounts of motivation and emotion.
2. Students will be able to analyze relations between environmental events and an individual's motivations and emotions.

PSY 414 - Principles of Animal Behavior

Review of field and laboratory studies on the determinants and mechanisms of animal behavior to establish relations between behavior of similar and different species. (Note- We are planning to archive this course as a consequence of the retirement of the instructor).

PSY 416 - Cognitive Psychology

Current developments in cognitive psychology with major emphasis on research in human learning, memory, information processing, problem solving, concept formation and thinking. (Formerly PSY 431; implemented Spring 2003.) Prereq(s): PSY 101 or PSY 105

Student Learning Outcomes:

1. Students will be able to describe in writing the limitations and strengths of experimental approaches used in cognitive neuroscience.
2. Students will be able to interpret data (e.g., graphs) and produce predicted outcome figures describing experimental results in writing.
3. Students will be able to describe in writing the rationale, experimental approach, results and limitations of individual empirical papers.
4. Students will be able to formulate experimental questions in writing and describe an experimental approach to test their question.

PSY 419 - Conditioning and Learning

Factors and conditions which enhance or retard learning. Survey of learning theories and basic principles of classical conditioning, instrumental conditioning and discrimination learning. (Formerly PSY 421/621; implemented Spring 2003.) Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to compare and evaluate different theories of learning.
2. Students will be able to critically assess claims with respect to causes of behavior.
3. Students will be able to analyze relations between an individual's behavior and environmental events - within and outside the laboratory.

PSY 427 - Computer Applications in Social and Behavioral Science

Advanced use of computer in a variety of areas of the social and behavioral sciences. Prereq(s): PSY 101 or PSY 105; PSY 210.

Student Learning Outcomes:

1. Students will be proficient in computer programming techniques and able to work with a specific programming language
2. Students will be able to apply programming to create and control psychological experiments
3. Students will be able to create and manipulate stimuli used in behavioral experiments
4. Students will be able to perform basic data analysis and plotting

PSY 431 - Multicultural Psychology

Cross-cultural studies of personality. Theories of the relationship between the individual and cultural milieu, and investigation of the extent to which cultural forces affect behavior. (Diversity course.) Prereq(s): PSY 101; PSY 240.

Student Learning Outcomes:

1. Students will be able to identify the complex elements important to members of a diverse cultural group or groups in relation to their psychological beliefs and practices.
2. Students will be able to use psychological models and theories of multi- and global cultural difference to investigate topics in diversity and equity.
3. Students will be able to analyze and interpret information about cultural differences, cultural rules, and cultural biases about non-dominant or marginalized groups.
4. Students will be able to critically examine complex issues and problems in psychology using global cultural context.
5. Students will be able to select appropriate methods of inquiry to apply to psychological problems in global contexts.

PSY 432 - Human Memory

Theoretical and experimental analysis of human memory. Emphasis on historical, antecedents, laboratory and naturalistic paradigms, memory systems, encoding and retrieval processes and mechanisms of forgetting. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to describe in writing the mechanisms underlying episodic and working memory.
2. Students will be able to interpret data (e.g., graphs) and produce predicted outcome figures describing experimental results in writing.
3. Students will be able to describe in writing the rationale, experimental approach, results and limitations of individual empirical papers.

PSY 435 - Personality

Survey of major theories of personality. Personality development, structure and dynamics. Examination of major areas of research on personality. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to critically apply major concepts from several personality theorists to explain familiar examples of common human thought and behavior.
2. Students will be able to place each of several personality theories into its historical 20th century Western psychology context, tracing each to its psychoanalytic, humanistic, behavioral, or biological basis theoretical roots.
3. Students will be able to compare and contrast each major personality theory according to modern scientific criteria.

PSY 436 - Mindfulness in Psychology

Theoretical and experimental analysis of human memory. Emphasis on historical, antecedents, laboratory and naturalistic paradigms, memory systems, encoding and retrieval processes and mechanisms of forgetting. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to describe in writing the mechanisms underlying episodic and working memory.
2. Students will be able to interpret data (e.g., graphs) and produce predicted outcome figures describing experimental results in writing.
3. Students will be able to describe in writing the rationale, experimental approach, results and limitations of individual empirical papers.

PSY 439 - Field Experience in the Teaching of Psychology

Supervised teaching experience as a proctor for students enrolled in introductory-level courses. Maximum of 6 credits. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to apply the knowledge, perspectives, principles, and types of reasoning employed in psychology as a social science.
2. Students will be able to demonstrate how the knowledge, perspectives, principles, and types of reasoning utilized in psychology as a social science may contribute to learning and human development.

3. Students will be able to demonstrate learning and teaching skills that showcase integrative thinking and the ability to transfer knowledge and skills from one setting to another.

PSY 440 - Field Experience in Behavior Analysis

Supervised experience in the application of behavioral principles and methods to behavior change. Maximum 6 credits.

Student Learning Outcomes:

1. Students will be able to apply the knowledge, perspectives, principles, and types of reasoning employed in psychology as a social science.
2. Students will be able to demonstrate how the knowledge, perspectives, principles, and types of reasoning utilized in psychology as a social science may contribute to learning and human development.
3. Students will be able to demonstrate learning and teaching skills that showcase integrative thinking and the ability to transfer knowledge and skills from one setting to another.

PSY 441 - Abnormal Psychology

Psychology of abnormal behavior--primarily neuroses and psychoses--stressing symptomatology, etiology, dynamics and problems in diagnosis. (PSY 641 not open to psychology majors.) Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to describe contemporary approaches to defining abnormal behavior and to apply those definitions to instances of behavior
2. Students will be able to relate current issues in abnormal behavior to historical arguments about the definition, etiology, and treatment of abnormal behavior
3. Students will be able to interpret major classes of abnormal behavior from a functional contextual and/or other perspectives, including consideration of cultural and developmental influences.
4. Students will be able to describe the defining features of major classes of abnormal behavior in areas such as anxiety disorders, mood disorders, dissociative disorders, eating and sleep problems, behavioral problems and physical disease, sexual problems, substance use, personality disorders, schizophrenia, and developmental disorders.
5. Students will be able to describe the application of scientific principles and methods for the evaluation of major theories of abnormal behavior and for the evaluation of approaches to the assessment and treatment of abnormal behavior.
6. Students will be able to identify the risk and protective factors related to the development and maintenance of clinical phenomenon discussed in class and generally how the factors are assessed/measured.

PSY 442 - Psychology of Aging

Introduction to theories and research on the aging process. Practical applications.

Student Learning Outcomes:

1. Students will be able to describe the concepts of “aging” and “development” are defined and studied by psychologists

2. Students will be able to describe contemporary theories and research methods relevant to the study of adult development and aging
3. Students will be able to describe the effects of “aging” on behavioral, cognitive, and psychosocial processes throughout the adult life-span
4. Students will be able to describe the plasticity of functioning in late life and how lifestyle and the environment can affect the aging process.
5. Students will be able to apply course material to one’s own development and/or the development of others.

PSY 443 - Research Methods in Behavior Analysis

Design, implementation, and evaluation of applied behavior analysis research. Prereq(s): PSY 101; PSY 240; PSY 205

Student Learning Outcomes:

1. Students will be able to isolate dependent and independent variables when examining experiments.
2. Students will be able to explain the ethical requirements for the conduct of research.
3. Students will be able to develop a nontrivial, socially valid research question.
4. Students will be able to identify an appropriate within-subject research design.
5. Students will be able to develop and implement a collection system appropriate to a within-subject research design.
6. Students will be able to analyze and graph research data as appropriate to a within-subject research design.

PSY 446 - Human Neuropsychology

The study of human cognition and brain organization in brain-damaged patient groups that exhibit visual agnosias, aphasia, spatial neglect, and executive dysfunction. Prereq(s): PSY 101 or PSY 105.

Student Learning Outcomes:

1. Students will be able to identify individual parts of the human brain and understand the functions in which those locations play a role.
2. Students will be able to identify specific regions of the cortex and describe what types of behavioral symptoms might occur following damage to those regions.
3. Students will be able to describe several types of neuropsychological syndromes, their etiology and the symptoms that are associated with each syndrome.
4. Students will be able to describe methods of patient assessment, both behavioral and neuropathological.

PSY 447 - Geropsychology: Field Experience

Supervised experience in community agencies with a focus on psychological approaches to working with older people. Maximum of 6 credits. Prereq(s): PSY 442/642.

Student Learning Outcomes:

1. Students will be able to effectively work with those affected by memory disorders such as Alzheimer’s disease and detect how these disorders impact the behavior of older adults.
2. Students will be able to engage in effective communication with older adults with dementia.

3. Students will be able to document observations of during interactions with older adults with memory disorders.
4. Students will be able to facilitate pleasant experiences that result in positive effects on the mood and behavior of older adults with memory disorders.
5. Students will be able to critically evaluate the ethical issues that may arise in providing services to older adults (e.g., protection of privacy, confidentiality, informed consent, etc.) and elder abuse reporting requirements for psychologists.

PSY 448 - Geropsychology: Independent Study

Directed research projects. Maximum of 6 credits. Prereq(s): PSY 442/642.

Student Learning Outcomes:

1. Students will be able to practically examine ethical issues by conducting research through the interaction with older adults and their caregivers (e.g., protection of privacy, confidentiality, informed consent, etc.).
2. Students will be able to engage in the methods of applied behavioral research including direct observation and self-report methods including interviews and questionnaires
3. Students will be able to demonstrate a knowledge of conceptual, methodological, and practical aspects of conducting applied research including: a) the role of theory, b) research literature searches, c) methodological and practical considerations in data collection, d) data management, and e) issues that affect overall study organization.

PSY 450 - Industrial and Organizational Psychology

Application of psychological principles to individual and group management in government, business and industry. Topics include selections, management supervision, morale and productivity. (Formerly PSY 391; implemented Spring 2003.) Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to describe Organizational Behavior Management and associated behavioral and behavioral systems assessment and intervention methods used in organizational settings.
2. Students will be able to provide examples of: operationally defined and measurable individual and group performance(s), observation and record methods used to track target performance(s) in baseline and intervention phases, and performance change outcomes plus associated environmental manipulations.
3. Students will be able to describe, in detail, Organizational Behavior Management applications and issues in the recent published literature.

PSY 451 - Basic Principles of Psychotherapy

Basic psychological principles and theoretical approaches of individual psychotherapy.

Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to identify the complex elements important to members of a diverse cultural group or groups in relation to their psychological beliefs and practices.
2. Students will be able to use psychological models and theories of multi- and global cultural difference to investigate topics in diversity and equity.
3. Students will be able to analyze and interpret information about cultural differences, cultural rules, and cultural biases about non-dominant or marginalized groups.

4. Students will be able to critically examine complex issues and problems in psychology using global cultural context.
5. Students will be able to select appropriate methods of inquiry to apply to psychological problems in global contexts.

PSY 452 - Psychology of Trauma

Critical examination of etiology and treatment issues related to psychology studies in traumatic stress. Review of empirical research and psychotherapeutic principles. Prereq(s): PSY 101, PSY 210; CH 201; and, junior or senior standing. Recommended Preparation: PSY 441

Student Learning Outcomes:

1. Students will be able to apply, orally and in writing, the knowledge, perspectives, principles, and modes of analyses practiced in psychology related to the topic of trauma.
2. Students will be able to read and interpret works from different theoretical perspectives on the causes of traumatic symptoms and draw this information from empirical research in the area of trauma psychology.
3. Students will be able to use and apply the basic principles of the social sciences to understand the psychological literature on trauma.
4. Students will be able to demonstrate on understanding of how the empirical research on the etiology and treatment of trauma has impacted our ability to prevent and treat traumatic stress.
5. Students will be able to demonstrate critical thinking skills through writing, oral presentations, and informal class discussion. Using foundational knowledge acquired in the course students will apply the information to current events-providing the opportunity to transfer knowledge across settings.
6. Students will be able to demonstrate knowledge regarding psychological concerns related to the ethical behavior of researchers and therapists based off of an examination of cultural differences in trauma.

PSY 467 - Psychology of Gender

Critical examination of psychology and gender, using social, cognitive and biological perspectives; with analysis of these issues in contemporary literature. (Diversity and general capstone course.) (Same as WMST 467.) Prereq(s): PSY 101; CH 201 or CH 202 or CH 203; ENG 102; junior or senior standing.

Student Learning Outcomes:

1. Students will be able to apply, orally and in writing, the knowledge, perspectives, principles, and types of reasoning discussed in this course in the context of social science and cultural applications.
2. Students will be able to discuss the current role(s) gender plays in Western culture.
3. Students will be able to discuss differences in the functions of gender roles between Western and non-Western cultures.
4. Students will be able to identify in what ways gender and gender roles influence individuals' behaviors/thoughts, including your own.
5. Students will be able to demonstrate critical thinking skills through writing, oral presentations, and informal class discussion. Using foundational knowledge acquired in the course students will apply the information to current events - providing the opportunity to transfer knowledge across settings.

6. Students will be able to articulate and apply theoretical/philosophical foundations for the scientific study of gender.

PSY 472 - Experimental Analysis of Behavior

Review of current research in the experimental analysis of behavior. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to design experiments to determine functional relations with respect to an individual's behavior.
2. Students will be able to relate observations and experimental findings using the terminology of behavioral science.
3. Students will be able to apply results from the experimental analysis of behavior to solve individual and social problems.

PSY 473 - Radical Behaviorism

Survey of Skinner's work. Emphasis on the role of private events in a natural science, the analysis of verbal behavior and the conduct of psychological research. Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to distinguish the science of behavior from the philosophy of behaviorism.
2. Students will be able to differentiate radical behaviorism from methodological behaviorism and mentalism.
3. Students will be able to use the terms and concepts of behavior analysis in a technically accurate manner.
4. Students will be able to provide behavior analytic interpretations of various types of behavior.

PSY 475 - Research Thesis

Research investigation conducted and written in thesis form. Prereq(s): PSY 101; PSY 240

Student Learning Outcomes:

1. Students will be able to identify an original research question based on a review of the literature.
2. Students will be able to identify and demonstrate appropriate research methodologies.
3. Students will be able to engage in the thesis development independently and effectively.
4. Students will be able to identify and practice research ethics and responsible conduct in research.
5. Students will be able to reflect on feedback in the research process.
6. Students will be able to demonstrate proficiency (command of academic writing as appropriate for the discipline) in professional quality written, oral, reading, presentational, and graphic skills: oral defense, written thesis, scholarly article review according to the APA 6th Edition Publication Manual guidelines.
7. Students will be able to effectively explain the research to others in the field and to broader audiences.
8. Students will be able to demonstrate an understanding of the scholarly research process: proposal, prospectus, final thesis.

PSY 479 - Techniques in Neuroscience Laboratory

Guided exercises and student-designed projects will provide training in techniques to study neural mechanisms underlying development and behavior. BIOL 479 Prereq(s): BIOL 475; PSY 403 or PSY 405 or PSY 416.

Student Learning Outcomes:

1. Students will be able to present and evaluate alternative technical approaches to neuroscience research, especially regarding commonly employed experimental techniques.
2. Students will be able to perform experimental techniques in a laboratory setting, including: fluorescent microscopy, extracellular electrophysiology, and behavioral analysis in invertebrates and humans.
3. Students will be able to record all data and present for evaluation: organized records and reports containing experimental protocol, results, and data analysis.
4. Students will be able to show competency in experimental research including record keeping, by designing, executing, and presenting a short research project.
5. Students will be able to describe data analysis for electroencephalography techniques.

PSY 481 - Principles of Psychological Assessment

Theoretical and psychometric bases of psychological assessment. Survey of standard test, interview and observational techniques for evaluating behavioral cognitive and personality characteristics of individuals. Prereq(s): PSY 101

Student Learning Outcomes:

1. Students will be able to collect data with IOA assessments for a variety of topographical behaviors using frequency counts, partial and whole interval methods, latency measures and combinations of these.
2. Students will be able to conduct a preference assessment for edibles and for activities.
3. Students will be able to conduct a standard Functional Analysis, as well as "PAIRWISE" and extended FAs.

PSY 499 - Advanced Special Topics*

Study in a suitable topic under supervision of a faculty member. Maximum of 9 credits.

Prereq(s): PSY 101.

Student Learning Outcomes:

1. Students will be able to demonstrate knowledge of the special topic area of focus.
2. Students will show competency on a related topic of focus through written assignments and/or course presentations.

Topics and Semesters Offered (Fall 2008 – Spring 2015):

- Anxiety & Worry: Spring 2009
- Applied Research Social Influence: Spring 2009
- Behavior & Evolution: Fall 2012
- Behavioral Medicine: Fall 2014, Spring 2015
- Chronic Illness: Fall 2009
- Developmental Human Neuropsychology: Spring 2010, Spring 2011, Spring 2012, Spring 2013, Spring 2014, Spring 2015
- Eastern Philosophy & Mindfulness: Spring 2013, Spring 2014, Fall 2014, Spring 2015
- Emotion: Spring 2010
- Existential & Eastern Thought in Psychology: Spring 2011, Fall 2011

- Family Functioning & Psychology: Spring 2009, Spring 2010, Spring 2011, Spring 2014
- Forensic Psychology: Spring 2011, Fall 2011
- Green Behavior: Fall 2010
- How Other Animals Perceive the World: Fall 2012
- Human Neuropsychology: Fall 2008, Fall 2009
- Mindfulness & Acceptance: Fall 2008
- Pseudoscientific Thinking: Spring 2013, Spring 2014
- Psychology & Law: Fall 2010, Fall 2011
- Psychology of Personal Growth: Fall 2014, Spring 2015
- Psychopathology Family Functions: Fall 2008
- Relationships Across the Lifespan: Fall 2012
- Research Methods in Applied Behavior Analysis: Fall 2009, Fall 2014, Spring 2015
- Romantic Relations: Fall 2009
- Science vs Pseudoscience: Spring 2012
- Sensory Development & Plasticity: Fall 2014, Spring 2015
- The Science of Consequences: Spring 2014
- Trauma: Fall 2010

**The chair has requested that any 499 topic that has been successfully taught twice and that the faculty member would like to continue to teach, be submitted to Courses and Curriculum. This would provide a unique course number for the class and a listing in the catalogue. This request has been difficult to enforce.*

Appendix II- Graduate Courses

	Course Title	Course Description	Student Learning Outcomes
603	PHYSIOLOGICAL PSYCHOLOGY	Physiological mechanisms associated with reflex action, emotions, motor skills, thinking and language. Effects of drugs, internal secretions and neural lesions on behavior. Prereq(s): PSY 101.	Students will recall the basics of human neural anatomy, neural function, and psychopharmacology. Students will be able to recognize the basic mechanisms that provide for our behavioral capacities and behavioral pathologies. Students will demonstrate the ability to compare and contrast current methods used in neuroscience research.
605	PERCEPTION	Basic principles by which individuals perceive their environment. Topics can include the perception of form, color, space and depth. Prereq(s): PSY 101.	<ul style="list-style-type: none"> •Students will be able to describe basic psychological and neural processes involved in perception •Students will demonstrate the ability to discuss and describe in writing the psychophysical and neural methods for studying the senses •Students will be able to solve basic problems related to how the senses work •Students will be able to discuss current theories of human perception
607	APPLIED BEHAVIOR ANALYSIS	Application of behavioral principles and techniques in the home, school, hospital and institution. Emphasis on motivational and learning procedures for use with problem behaviors in children and adults. (Formerly PSY 406/607; implemented Spring 2003.) Prereq(s): PSY 101.	<ul style="list-style-type: none"> * Students will be to describe typical behavioral assessment and intervention methods used across various populations (e.g., developmental disabilities, Autism, adolescents, older adults), settings (e.g., human service,organizational), and professional disciplines (e.g., pediatrics, rehabilitation, clinical psychology, education). * Students will be able to provide examples of: operationally defined measurable behavioral performance in humans, observation and record methods used to track that performance in baseline and intervention phases, and behavior change outcomes and associated contingent environmental manipulations. * Students will be able to describe, in detail, current Applied Behavior Analytic applications and issues in the recent published literature related to an area of application.
608	HISTORY OF PSYCHOLOGY	Historical background of psychology from the Greek period to the present. Development of psychology as a science and advances during this century. Prereq(s): PSY 101.	<ul style="list-style-type: none"> • Students will be able to discuss the global and historical themes that have contributed to the development of the field of contemporary psychology. • Students will be able to identify major psychological systems, their theories, the historical context in which they came to exist, and the individuals who contributed to their development through discussing the general progression of psychological thought and theory throughout history. • Students will be able to discuss the historical contributors to the current state of mental health treatment delivery. • Students will be able to effectively critique the role in which history plays in the development of psychological science. • Students will be able to demonstrate a level of comprehension of the various psychological systems in order to differentiate between and find commonalities across these systems. • Students will be able to demonstrate critical thinking skills through writing and informal class discussion. Using foundational knowledge acquired in the course students will apply the information to current events-providing the opportunity to transfer knowledge across settings.

610	PHILOSOPHICAL CRITICISMS OF PSYCHOLOGICAL RESEARCH	Review of criticisms of psychological research by philosophers in the tradition of ordinary language analysis. Prereq(s): PSY 101.	<ul style="list-style-type: none"> • Students will be able to explain in written and oral communication how underlying philosophical methodologies interact with contemporary psychology by describing specific instances. • Students will be able to effectively critique psychological methodologies and explain their limits. • Students will be able to discuss the role of philosophical problems in psychological research. • Students will be able to engage in critical thinking regarding the role of psychology in philosophical problems. • Students will be able to, from a philosophical perspective, critically evaluate the APA ethical code. Take and defend a position in whether or not it is satisfactory. • Students will be able to demonstrate understanding of the role of historical contributors to present day views of philosophical psychology.
614	PRINCIPLES OF ANIMAL BEHAVIOR	Review of field and laboratory studies on the determinants and mechanisms of animal behavior to establish relations between behavior of similar and different species.	The CBS area of psychology would like to archive this course since it has not been recently offered. We would like to reserve this course number and title for time being, since we are planning on making several new hires into our area in the next three years.
616	COGNITIVE PSYCHOLOGY	Current developments in cognitive psychology with major emphasis on research in human learning, memory, information processing, problem solving, concept formation and thinking. (Formerly PSY 431; implemented Spring 2003.) Prereq(s): PSY 101.	<p>Students will be able to describe in writing the limitations and strengths of experimental approaches used in cognitive neuroscience.</p> <p>Students will be able to interpret data (e.g., graphs) and produce predicted outcome figures describing experimental results in writing.</p> <p>Students will be able to describe in writing the rationale, experimental approach, results and limitations of individual empirical papers.</p> <p>Students will be able to formulate experimental questions in writing and describe an experimental approach to test their question.</p>
619	CONDITIONING AND LEARNING	Factors and conditions which enhance or retard learning. Survey of learning theories and basic principles of classical conditioning, instrumental conditioning and discrimination learning. (Formerly PSY 421/621; implemented Spring 2003.) Prereq(s): PSY 101.	<ul style="list-style-type: none"> • Students will be able to compare and evaluate different theories of learning. • Students will be able to critically assess claims with respect to causes of behavior. • Students will be able to analyze relations between an individual's behavior and environmental events - within and outside the laboratory.
627	COMPUTER APPLICATIONS IN SOCIAL AND BEHAVIORAL SCIENCE	Advanced use of computer in a variety of areas of the social and behavioral sciences. Prereq(s): PSY 101; PSY 210.	<ul style="list-style-type: none"> • Students will be proficient in computer programming techniques and able to work with a specific programming language • Students will be able to apply programming to create and control psychological experiments • Students will be able to create and manipulate stimuli used in behavioral experiments • Students will be able to perform basic data analysis and plotting
632	HUMAN MEMORY	Theoretical and experimental analysis of human memory. Emphasis on historical, antecedents, laboratory and naturalistic paradigms, memory systems, encoding and retrieval processes and mechanisms of forgetting. Prereq(s): PSY 101.	<ul style="list-style-type: none"> • Students will be able to describe in writing the mechanisms underlying episodic and working memory. • Students will be able to interpret data (e.g., graphs) and produce predicted outcome figures describing experimental results in writing. • Students will be able to describe in writing the rationale, experimental approach, results and limitations of individual empirical papers.

635	PERSONALITY	Survey of major theories of personality. Personality development, structure and dynamics. Examination of major areas of research on personality. Prereq(s): PSY 101.	<p>Upon successful completion of this course, students will be able to:</p> <ol style="list-style-type: none"> 1. Critically apply major concepts from several personality theorists to explain familiar examples of common human thought and behavior. 2. Place each of several personality theories into its historical 20th century Western psychology context, tracing each to its psychoanalytic, humanistic, behavioral, or biological basis theoretical roots. 3. Compare and contrast each major personality theory according to modern scientific criteria.
641	ABNORMAL PSYCHOLOGY	Psychology of abnormal behavior--primarily neuroses and psychoses--stressing symptomatology, etiology, dynamics and problems in diagnosis. (PSY 641 not open to psychology majors.) Prereq(s): PSY 101.	<p>1) As a result of actively participating in the course by attending course lectures and reading course material:</p> <ol style="list-style-type: none"> a. Students will be able to describe contemporary approaches to defining abnormal behavior and to apply those definitions to instances of behavior b. Students will be able to relate current issues in abnormal behavior to historical arguments about the definition, etiology, and treatment of abnormal behavior c. Students will be able to interpret major classes of abnormal behavior from a functional contextual and/or other perspectives, including consideration of cultural and developmental influences d. Students will be able to describe the defining features of major classes of abnormal behavior in areas such as anxiety disorders, mood disorders, dissociative disorders, eating and sleep problems, behavioral problems and physical disease, sexual problems, substance use, personality disorders, schizophrenia, and developmental disorders e. Students will be able to describe the application of scientific principles and methods for the evaluation of major theories of abnormal behavior and for the evaluation of approaches to the assessment and treatment of abnormal behavior f. Students will be able to identify the risk and protective factors related to the development and maintenance of clinical phenomenon discussed in class and generally how the factors are assessed/measured <p>2) By actively engaging in course activities students will be able to accurately answer over 80% of questions on multiple choice exams.</p>
642	PSYCHOLOGY OF AGING	Introduction to theories and research on the aging process. Practical applications. (Formerly PSY 446/646; implemented Spring 2003.) (Same as GERO 442.)	<ol style="list-style-type: none"> 1) Students will be able to describe the concepts of "aging" and "development" are defined and studied by psychologists; 2) Students will be able to describe contemporary theories and research methods relevant to the study of adult development and aging; 3) Students will be able to describe the effects of "aging" on behavioral, cognitive, and psychosocial processes throughout the adult life-span; 4) Students will be able to describe the plasticity of functioning in late life and how lifestyle and the environment can affect the aging process. 5) Students will be able to apply course material to one's own development and/or the development of others.

647	GEROPSYCHOLOGY: FIELD EXPERIENCE	Supervised experience in community agencies with a focus on psychological approaches to working with older people. Maximum of 6 credits. Prereq(s): PSY 442/642.	<ul style="list-style-type: none"> • Students will be able to effectively work with those affected by memory disorders such as Alzheimer's disease and detect how these disorders impact the behavior of older adults. • Students will be able to engage in effective communication with older adults with dementia. • Students will be able to document observations of during interactions with older adults with memory disorders. • Students will be able to facilitate pleasant experiences that result in positive effects on the mood and behavior of older adults with memory disorders. • Students will be able to critically evaluate the ethical issues that may arise in providing services to older adults (e.g., protection of privacy, confidentiality, informed consent, etc.) and elder abuse reporting requirements for psychologists.
648	GEROPSYCHOLOGY: INDEPENDENT STUDY	Directed research projects. Maximum of 6 credits. Prereq(s): PSY 442/642.	<ul style="list-style-type: none"> • Students will be able to practically examine ethical issues by conducting research through the interaction with older adults and their caregivers (e.g., protection of privacy, confidentiality, informed consent, etc.). • Students will be able to engage in the methods of applied behavioral research including direct observation and self-report methods including interviews and questionnaires • Students will be able to demonstrate a knowledge of conceptual, methodological, and practical aspects of conducting applied research including: a) the role of theory, b) research literature searches, c) methodological and practical considerations in data collection, d) data management, and e) issues that affect overall study organization.
651	BASIC PRINCIPLES OF PSYCHOTHERAPY	Basic psychological principles and theoretical approaches of individual psychotherapy. Prereq(s): PSY 101.	Upon successful completion of this course, students will be able to: 1) explain the common factors of psychotherapy 2) identify ethical issues and problems in psychotherapy 3) explain the differences among the major models of psychotherapy 4) recognize and evaluate psychotherapies according to their evidence base
673	RADICAL BEHAVIORISM	Survey of Skinner's work. Emphasis on the role of private events in a natural science, the analysis of verbal behavior and the conduct of psychological research. Prereq(s): PSY 101.	<ul style="list-style-type: none"> *Students will be able to distinguish the science of behavior from the philosophy of behaviorism. *Students will be able to differentiate radical behaviorism from methodological behaviorism and mentalism. *Students will be able to use the terms and concepts of behavior analysis in a technically accurate manner. *Students will be able to provide behavior analytic interpretations of various types of behavior.
680	MOTIVATION AND EMOTION	Basic principles of motivation. Examination of major themes and contemporary research in the field. Application of motivational psychology to special areas, including educational and business. Prereq(s): PSY 101.	<ul style="list-style-type: none"> • Students will be able to evaluate scientific and pre-scientific accounts of motivation and emotion. • Students will be able to analyze relations between environmental events and an individual's motivations and emotions.

681	PRINCIPLES OF ANIMAL BEHAVIOR	Review of field and laboratory studies on the determinants and mechanisms of animal behavior to establish relations between behavior of similar and different species. (Same as BIOL 481/681.) Prereq(s): Junior status or above and two courses in biology or one course in biology and one course in psychology.	<p>1) As a result of actively participating in the course by attending course lectures and reading course material students will be able to:</p> <ul style="list-style-type: none"> • Describe contemporary technical standards that are applied in evaluating the reliability and validity of assessment methods • Describe the characteristics, advantages, and limitations of inferential, descriptive, actuarial, and direct observation methods of psychological assessment • Describe the importance of cultural considerations in psychological assessment • Describe issues that should be considered in the assessment of special populations and disordered behaviors such as violence and suicidality • Describe ethical issues that arise in psychological assessment <p>2) By actively engaging in course activities students will be able to accurately answer over 80% of questions on multiple choice and short answer exams.</p>
699	ADVANCED SPECIAL TOPICS	Study in a suitable topic under supervision of a faculty member. Maximum of 9 credits. Prereq(s): PSY 101.	<ul style="list-style-type: none"> • Students will be able to demonstrate knowledge of the special topic area of focus. • Students will show competency on a related topic of focus through written assignments and/or course presentations.
609	PRINCIPLES IN BEHAVIOR ANALYSIS	Reviews the basic terms, concepts, principles, facts and laws in behavior analysis.	Students shall articulate orally and in writing (1) the basic tenets of evolutionary theory and their relation to behavior science, (2) the various types of nonassociative learning processes and their relation to associative learning processes, (3) the traditional and modern views of classical conditioning, and (4) the substance of operant learning theory, research, and application.
695	ETHICS IN PSYCHOLOGY	Ethical issues involved in clinical and research activities in psychology and behavior analysis in particular.	Students shall (1) complete the initial education requirements set forth by the UNR OHRP, (2) articulate the ethical guidelines established by the Behavior Analysis Certification Board (BACB), (4) generate real-life scenarios relevant to the BACB ethical guidelines, (5) describe how moral behavior develops throughout the lifespan, and (6) discuss the rise, growth and present-day regulatory practices in behavior analysis.
706	INTERMEDIATE STATISTICS I	Theory and application of statistical inference with special emphasis on probability, parametric and nonparametric techniques including simple and complex analysis of variance, multiple comparison techniques and trend analysis. (Same as SOC 706.) Prereq(s): PSY 210.	<p>Students will be able to describe and accurately communicate fundamental characteristics of categorical and quantitative data</p> <p>Students will be able to apply parametric inferential statistical techniques to categorical and quantitative data</p> <p>Students will be able to accurately communicate the results of parametric inferential statistical techniques</p>

707	INTERMEDIATE STATISTICS II	Theory and application of statistical inference with special emphasis on multivariate models, including multiple and partial regression, factor analysis, path analysis and discriminant function analysis. (Same as SOC 707.) Prereq(s): PSY 706.	At the end of this course, students will:1. Demonstrate the ability to account for the relevant measurement issues in planning research projects that will be appropriate for regression-bases analyses in discussion and written work.2. Perform and write the results of an a priori sample size analysis for research design and post-hoc power analysis and evaluate the implications of these analyses for study designs and interpretation of statistical procedures covered in this class. 3. Demonstrate the ability to apply the assumptions underlying regression modeling in their work by using the procedures to check that the assumptions are met and/or how one might compensate if the assumptions are not met in homework assignments and discussion. This includes demonstrating the ability to evaluate the implications of these analyses in relation to study designs and interpretation of statistical analyses covering in this class in homework and written assignments4. Demonstrate the ability to apply the principles behind procedures for dealing with missing data in discussions and written work and be able to use basic missing data procedures in data analysis 5. Be able to use a regression approach to analyze the relationship between multiple categorical and/or continuous independent variables and a dependent continuous, count, categorical, or dichotomous variable 6. Demonstrate the ability to accurately perform, interpret, and write the results of the following analyses in homework, discussion and written work; moderation, mediation, path modeling, basic nested data analysis and exertions of this approach to longitudinal data analysis
708	SEMINAR IN PHILOSOPHICAL PSYCHOLOGY	Problems concerning the relations of psychology, philosophy, neurobiology, artificial intelligence, and computer-like processing in cognition. (Same as PHIL 708.)	Students will be able to describe the meta-postulates, postulates, concepts, and principles pertinent to a natural science of behavior. Students will be able to describe the proto-postulates and concepts central to a naturalistic formulation of the philosophy of science. Students will be able to provide an informed critique of dualistic formulations of science and the philosophy of science.
709	COMPARATIVE SENSORY NEUROSCIENCE	Examination of sensory systems of non-human species with an emphasis on sensory capabilities, such as electromagnetic detection and sonar, that are not found in humans.	<ul style="list-style-type: none"> •Students will be able to read and critically evaluate relevant scientific literature in the area of comparative sensory processing. •Students will be able to verbally summarize current research and critically review the literature pertaining to comparative sensory processing.
711	EXPERIMENTAL ANALYSIS OF BEHAVIOR	Advance study of past and present research in the experimental analysis of behavior. (Formerly PSY672; implemented Spring 2009). Prereq(s): PSY 609 R.	<ul style="list-style-type: none"> • Students will be able to design and implement laboratory experiments to determine functional relations with respect to the behavior of an individual animal or human. • Students will be able to critically evaluate and discuss observations and experimental findings using the terminology of behavioral science. • Students will be able to apply results from the experimental analysis of behavior to solve individual, scientific, and social problems.
713	BEHAVIORAL AND SYSTEMS ASSESSMENT	Theory and methods of the behavioral assessment of individuals and systems. Direct observation, environmental assessment, functional analysis, task analysis, needs assessment,	Upon completion of this course, students will be able to determine the appropriate protocol to conduct preference assessments, discrimination abilities assessments, direct behavioral observational assessments experimental functional analyses, and basic precision teaching methods for assessing learning with individuals with intellectual disabilities, autism,

		program monitoring and evaluation.	or other developmental disabilities.
714	SUPERVISED CLINICAL PRACTICUM I	Supervised theoretical and practical experience of individual, group, couple and family therapy. Prereq(s): Admitted to clinical psychology program.	1. Explain and critically analyze theoretical models of intervention for clinical problems presented in clinical cases. 2. Develop and communicate concise theoretical case formulations for clinical cases treated. 3. Demonstrate the ability to evaluate clinical progress and to apply evidence-based interventions in the course of treating clinical cases.
715	SUPERVISED CLINICAL PRACTICUM II	Supervised theoretical and experiential application of advanced adult and couple approaches in psychotherapy and assessment. Prereq(s): Admitted to the clinical psychology program.	1. Explain and critically analyze theoretical models of intervention for clinical problems presented in clinical cases. 2. Develop and communicate concise theoretical case formulations for clinical cases treated. 3. Demonstrate the ability to evaluate clinical progress and to apply evidence-based interventions in the course of treating clinical cases.
716	SUPERVISED CLINICAL PRACTICUM III	Supervised theoretical and experiential application of child-family approaches in psychotherapy, assessment and community psychology. Prereq(s): Admitted to the clinical psychology program.	1. Explain and critically analyze theoretical models of intervention for clinical problems presented in clinical cases. 2. Develop and communicate concise theoretical case formulations for clinical cases treated. 3. Demonstrate the ability to evaluate clinical progress and to apply evidence-based interventions in the course of treating clinical cases.
717	SUPERVISED CLINICAL PRACTICUM IV	Supervised theoretical and experiential application of advanced child-family approaches in psychotherapy, assessment and community psychology. Prereq(s): Admitted to the clinical psychology program.	1. Explain and critically analyze theoretical models of intervention for clinical problems presented in clinical cases. 2. Develop and communicate concise theoretical case formulations for clinical cases treated. 3. Demonstrate the ability to evaluate clinical progress and to apply evidence-based interventions in the course of treating clinical cases.
718	RESEARCH METHODS IN SOCIAL PSYCHOLOGY	Theory construction and application of research methods in social psychology. (Same as HDFS 718 and SOC 718.)	1. Explain and critically analyze theoretical models of intervention for clinical problems presented in clinical cases. 2. Develop and communicate concise theoretical case formulations for clinical cases treated. 3. Demonstrate the ability to evaluate clinical progress and to apply evidence-based interventions in the course of treating clinical cases.
720	SEMINAR IN SENSATION AND PERCEPTION	Experiments and problems in sensation and perception. Prereq(s): PSY 405.	<ul style="list-style-type: none"> •Students will be able to discuss at an advanced level current theories and knowledge about the senses •Students will be able to critically evaluate empirical research on the senses •Students will be able to discuss the applications and limits of different methodologies in perceptual psychology and sensory neuroscience
721	ADVANCED PSYCHOPHYSIOLOGY	Current developments and animal physiological research relating to general principles of sensation, perception and behavior. Prereq(s): PSY 403.	<ul style="list-style-type: none"> •Students will be able to recall at an advanced level familiarity with the basics of human neural anatomy, neural function, and psychopharmacology. •Students will be able to read and critically evaluate relevant scientific literature at an advanced level in the area of psychophysiology. •Students will be able to verbally summarize current research and critically review the most recent literature pertaining to their research topic.

722	ATTITUDES: STRUCTURES, FUNCTION AND CHANGE	History, theory, assessment, empirical principles and current research. Attitude components; functions served by attitudes; related constructs; attitudes, psychology, processes and actions; attitude change. (Same as SOC 722.) Prereq(s): Admission to doctoral program in social psychology.	<ul style="list-style-type: none"> •Students will be able to identify important theories, findings and controversies pertaining to attitudes, and describe major insight from different areas of attitudes research. •Students will demonstrate familiarity with major empirical research methods in social psychological research on attitudes. •Students will demonstrate analytical skills in examining and critiquing theory and research pertaining to social psychological research on attitudes.
723	APPLIED RESEARCH METHODOLOGY I	Theory and philosophy of research designs in applied psychology, covering single-case designs in the applied environment, theory construction and philosophy of science issues.	<p>a. Students will be able to take and defend a position on the nature and purposes of science and link that perspective to key features of a robust research program in applied psychology.b. Students will be able to describe strategic, methodological, theoretical, and philosophical steps that maximize the likelihood that a research program will make a profound difference in the field.c. Students will be able to relate applied research programs that succeed to the economic, political, practical, and professional contexts of these programs. d. Students will be able to design time series experiments focused on the intensive analysis of individuals to ask a range of applied psychology questions.e. Students will be able to describe how intensive analyses of individuals can be combined with group designs and other research methods to conduct a research program that makes a difference in applied psychology.f. Students will be able to organize research programs into major approaches to philosophy of science and will be able to distinguish empirical research issues from philosophical issues.g. Students will be able to take and defend a position on the proper relationship between basic and applied psychological research.h. Students will be able to explain the steps in conducting a program evaluation.</p>
724	APPLIED RESEARCH METHODOLOGY II	Theory and philosophy of research designs in applied psychology, covering group designs, quasi-experimental designs, psychometric theory, classical test construction, reliability, validity, and meta-analysis.	<ol style="list-style-type: none"> 1. Students will be able to discuss, critique and apply experimental and quasi-experimental design principles to their own research and literature in their field. 2. Students will be able to discuss and identify components of construct, internal, external, and statistical conclusion validity as it applies research design. 3. Students will be able to identify ethical issues and standards as it pertains to research design. 4. Students will be able to discuss factors that affect their own behavior as scientists including heuristics errors such as confirmation bias.
729	HUMAN MEMORY	Critical review of principles, theories and current research in human memory.	<ul style="list-style-type: none"> •Students will be able to describe theoretical perspectives and current theoretical debates in the field of memory. •Students will be able to read and evaluate empirical articles in the field of memory. •Students will be able to develop experimental protocols to test existing theoretical questions.
734	SOCIAL PSYCHOLOGY OF GENDER	Examination of major social psychological theories and research on gender issues throughout the life course. Emphasis is on gender differences with regard to socialization and its consequences. (Same as SOC 734.)	<ul style="list-style-type: none"> •Students will be able to identify important theories, findings and controversies pertaining to the social psychology of gender, and describe major insight from different areas of gender research. •Students will demonstrate familiarity with major empirical research methods in social psychological research on gender. •Students will demonstrate analytical skills in examining and critiquing theory and research pertaining to social psychological research on gender.

739	ADVANCED SOCIAL PSYCHOLOGY I	Critical examination of selected major sociological and psychological theories in social psychology, including a review of selected developing areas of social psychology. (Same as SOC 739.)	<ol style="list-style-type: none"> 1. Students will be able to explain major theories in social psychology 2. Students will be able to explain methods of research and statistical analysis used in major lines of research in social psychology 3. Students will be able to the varying positions and evidence for those positions regarding current controversies in social psychology 4. Students will be able to identify appropriate topics for future research in the area
743	CULTURAL DIVERSITY	Psychological implications and consequences of cultural diversity with respect to applied psychological practice and research. Emphasis on racial, cultural, sexual orientation and gender differences.	<ol style="list-style-type: none"> 1. Students will be able to summarize current research and critically review the literature related to assessment and diagnosis with an emphasis on examining the role of cultural and individual diversity in conceptualizing cases. 2. Students will be able to discuss the relationship of cultural and individual diversity in formulating and implementing intervention strategies, including training in empirically supported procedures 3. Students will be able to articulate both in writing and verbally an ability to critically analyze the major theoretical considerations in relation to cultural and individual diversity as they pertain to consultation, supervision, and evaluating the efficacy of interventions.
746	SOCIAL PSYCHOLOGY AND LAW	Examination of social psychological processes as they affect legal systems, including studies of jury behavior, procedural justice, plea bargaining and alternative dispute resolution. (Same as SOC 746.) Prereq(s): Admission to doctoral program in social psychology.	<ul style="list-style-type: none"> •Students will be able to identify important theories, findings and controversies pertaining to the social psychology of gender, and describe major insight from different areas of gender research. •Students will demonstrate familiarity with major empirical research methods in social psychological research on gender. •Students will demonstrate analytical skills in examining and critiquing theory and research pertaining to social psychological research on gender.
747	BEHAVIOR ANALYSIS OF LANGUAGE AND COGNITION	Theoretical and empirical analysis of verbal phenomena such as reference and understanding and its application to human reasoning.	<p>Students will be able to describe the premises, concepts and principles entailed in a behavior analytic interpretation of language and cognition.</p> <p>Students will be able to provide an informed critique of a behavior analytic interpretation of language and cognition along with alternatives to this approach.</p>
748	COMMUNITY PSYCHOLOGY	Mental health problems of population, including psychological epidemiology and mental health needs of communities. Mental health consultation and education. Crisis intervention. Prereq(s): Graduate standing in behavioral or health sciences.	<p>Upon successful completion of this course, students will be able to:</p> <ol style="list-style-type: none"> 1) explain the differences between primary and secondary prevention 2) design primary and secondary prevention interventions 3) explain the differences between individual and community levels of analysis 4) explain the differences between clinical psychology and community psychology in theory and practice 5) evaluate community level prevention and intervention programs

750	SEMINAR IN CLINICAL PSYCHOLOGY	Consideration of contemporary theory, research and practices in the field of clinical psychology. Prereq(s): Admission to the clinical psychology program.	<ol style="list-style-type: none"> 1. Students will be able to summarize current research and critically review the literature within the specific topic area of the colloquium section taken. 2. Students will be able to discuss the relationship of the specialized topic area of the colloquium section taken within the broader context of the field of clinical psychology. 3. Students will be able to articulate in writing or verbally and critically analyze the major theoretical approaches reported in the literature within the specific topic area of the colloquium section taken.
751	SEMINAR IN CLINICAL PSYCHOLOGY	Consideration of contemporary theory, research and practices in the field of clinical psychology. Prereq(s): Admission to the clinical psychology program.	<ol style="list-style-type: none"> 1. Students will be able to summarize current research and critically review the literature within the specific topic area of the colloquium section taken. 2. Students will be able to discuss the relationship of the specialized topic area of the colloquium section taken within the broader context of the field of clinical psychology. 3. Students will be able to articulate in writing or verbally and critically analyze the major theoretical approaches reported in the literature within the specific topic area of the colloquium section taken.
752	GRADUATE RESEARCH	Research projects in psychology carried out under supervision. Maximum of 6 credits.	Students will conduct research relevant to their scientific interests under the supervision of a faculty member.
755	INDIVIDUAL READING	Supervised reading with regular conferences between student and instructor. Maximum of 9 credits.	Students will study the literature relevant to their academic interests under the supervision of a faculty member.
756	INTRODUCTION TO CLINICAL ASSESSMENT	Case conceptualization, treatment planning, evaluation, and research. Interviewing, observation, self-report, intelligence and personality assessment, and functional analysis. Prereq(s): Admitted to the clinical psychology program.	<ul style="list-style-type: none"> • Demonstrate an understanding of the basic theory underlying of functional behavioral assessment and its application for a primary functional difficulty in their intake assessment report. • Demonstrate proficiency in the administration, scoring, and interpretation of the Wechsler Adult Intelligence Scale – 4th Ed. (WAIS-IV) and Wechsler Intelligence Scale for Children – 5th Ed. (WISC-V). • Demonstrate an understanding of how the basic psychometric properties on the WISC and WAIS and limitations for use in minority groups affect the interpretation of results from these tests in the written reports in this class. • Describe the various theoretical, ethical, and professional issues related to psychological assessment as well as issues surrounding important controversies related to aspects of intelligence testing. • Understand the strengths weaknesses of current approaches to classifying mental disorders • Learn primary characteristics, epidemiology, and differences in cultural presentation of disorders covered in class • Analyze the effects of social context on psychopathology, and the effects of psychopathology on social context • Be aware of the controversies/diversity of opinions around each diagnosis covered in class and the implications of these controversies in clinical settings • Understand the role of differential diagnosis in case conceptualization and treatment planning within the ideographic context in which the problem occurs • Integrate various sources of client data, including background information, interview, and psychological test data to form a case conceptualization of a client in the form of a written report. • Provide clinically relevant feedback to clients based on results of assessment in a manner to promote their well being. • Demonstrate in their work with clients at the PSC the ability to make effective use of supervision

757	INTRODUCTION TO CLINICAL INTERVENTION	Theory and practice of clinical intervention with adults and children. Therapeutic systems. Emphasis on integration of theoretical, empirical, and practical knowledge. Prereq(s): Admitted to the clinical psychology program.	<p>Upon successful completion of this course, students will be able to:</p> <ol style="list-style-type: none"> 1) Explain and demonstrate the “common factors” in psychotherapy, including building a therapeutic relationship 2) Write a comprehensive clinical case conceptualization 3) Explain and demonstrate basic strategies for acceptance of clients in psychotherapy 4) Explain and demonstrate basic strategies for changing client behavior in psychotherapy
758	PROBLEMS AND INTERVENTION WITH ADULTS	Classification and etiology of symptoms, syndromes, and practical knowledge regarding their prevention and treatment. Prereq(s): Admitted to the clinical psychology program.	Students will be able to demonstrate an advanced level of competency in evaluating and performing a functional analysis of the affective, cognitive, and behavioral problems with which individuals present for psychological treatment. Students will be able to demonstrate an advanced level of competency in identifying and determining the priority of the problem sets with which individuals present for psychological treatment. Students will be able to summarize current research and critically review the literature pertaining to empirically supported treatments for psychological problems. Students will be able to discuss the relationship of psychological problems to the overall health and wellbeing of individuals who present for psychological treatment. Students will be able to explain and critically evaluate the psychometric soundness of the primary systems used to classify and diagnose psychological problems. Students will be able to articulate in writing and verbally a comprehensive case conceptualization and recommendations for psychological management of the problem set(s) summarized in the case conceptualization.
759	PROBLEMS AND INTERVENTION WITH CHILDREN	Classification and etiology of symptoms, syndromes, and behavior problems in children. Theoretical, empirical and practical knowledge regarding their prevention and treatment. Prereq(s): Admitted to the clinical psychology program.	<p>Students will demonstrate competence regarding the relevance of lifespan developmental theory and research for understanding child and adolescent psychopathology and treatment</p> <p>Students will demonstrate competence regarding evidence based treatments for child and adolescent problems.</p> <p>Students will demonstrate competence regarding the DSM classification systems of childhood disorders</p> <p>Students will demonstrate competence regarding pediatric integrated care.</p> <p>Students will demonstrate competence about key research issues and methods in child therapy.</p>
760	SPECIAL TOPICS IN BEHAVIOR ANALYSIS	Consideration of selected topics concerning current research problems and conceptual issues in behavior analysis. May be repeated for a maximum of 6 credits.	<ol style="list-style-type: none"> 1. Students will be able to explain major theories applicable to the area 2. Students will be able to explain the status of the research literature related to the major theories and issues of the area 3. Students will be able to explain research methods used to investigate the issues in question 4. Students will be able to identify appropriate topics for future research in the area
761	CONTEMPORARY ISSUES IN PSYCHOLOGY	Consideration in depth of selected topics of contemporary interest. Maximum of 6 credits each.	<ul style="list-style-type: none"> •Students will be able to demonstrate advanced knowledge of the special topic area of focus. •Students will show competency on a specific topic of focus through written assignments and/or course presentations.

762	CONTEMPORARY ISSUES IN PSYCHOLOGY	Consideration in depth of selected topics of contemporary interest. Maximum of 6 credits each.	<ul style="list-style-type: none"> • Students will be able to demonstrate advanced knowledge of the special topic area of focus. • Students will be able to design and implement laboratory experiments to determine functional relations with respect to the behavior of an individual human. • Students will be able to critically evaluate and discuss observations and experimental findings with humans using the terminology of behavioral science. • Students will be able to apply results from the experimental analysis of human behavior to solve individual, scientific, and social problems. • Students will show competency on a specific topic of focus through written assignments and/or course presentations.
763	SPECIAL TOPICS IN EXPERIMENTAL PSYCHOLOGY	Consideration of selected current research problems and conceptual issues in experimental psychology. Maximum of 9 credits.	<ul style="list-style-type: none"> • Students will be able to demonstrate advanced knowledge of the special topic area of experimental psychology. • Students will show competency on a specific topic of focus related to experimental psychology through written assignments and/or course presentations.
764	SPECIAL TOPICS IN SOCIAL PSYCHOLOGY	Consideration of selected current research problems and conceptual issues in social psychology. Maximum of 9 credits. (Same as SOC 764.)	<ol style="list-style-type: none"> 1. Students will be able to explain major theories applicable to the area 2. Students will be able to explain the status of the research literature related to the major theories and issues of the area 3. Students will be able to explain research methods used to investigate the issues in question 4. Students will be able to identify appropriate topics for future research in the area
765	BEHAVIOR ANALYSIS IN ORGANIZATIONS	Application of behavioral principles and methods to the analysis and modification of the behavior of individuals in organizations and institutions.	<ul style="list-style-type: none"> * Students will be able to describe conceptual development, research and technological application in Organizational Behavior Managements. * Students will be able to describe conceptual, methodological, and technological strength and weakness associated with this organizational approach, and • integrate themes and topics in behavior analysis that may contribute to the conceptual, methodological and technological development in Organizational Behavior Management.
766	BEHAVIOR ANALYSIS PRACTICUM I	Supervised practice in the application of behavioral principles and methods in organizational and institutional settings. May be repeated for a maximum of 6 credits.	<ul style="list-style-type: none"> * Students will be able to apply the knowledge, perspectives, principles, and types of reasoning employed in psychology as a social science. * Students will be able to demonstrate how the knowledge, perspectives, principles, and types of reasoning utilized in Behavior Analysis may contribute to behavioral assessment and interventions across educational, human service and organizational settings.
767	BEHAVIOR MANAGEMENT AND CONSULTATION	Theory and application of behavioral analytic techniques with special populations. Behavioral consultation and the development, management, and evaluation of behavioral programs.	<ul style="list-style-type: none"> • Students will be able to describe the foundations (concepts, principles, methods) underlying the application of behavior analysis to performance problems in organizations. • Students will be able to describe future directions and emerging trends in Organizational Behavior Management. • Students will be able to develop preliminary ideas for a consulting venture.
768	BEHAVIOR ANALYSIS PRACTICUM II	Supervised practice in the application of behavioral analytic techniques for special populations. Practice in behavioral consultation and the development and evaluation of behavioral programs. Maximum of 6 credits.	<ul style="list-style-type: none"> * Students will be able to apply the knowledge, perspectives, principles, and types of reasoning employed in psychology as a social science. * Students will be able to demonstrate how the knowledge, perspectives, principles, and types of reasoning utilized in Behavior Analysis may contribute to behavioral assessment and interventions across educational, human service and organizational settings.

769	BEHAVIORAL SYSTEMS ANALYSIS	Synthesis of the principles and concepts in the fields of behavior analysis and system analysis. Prereq(s): PSY 765.	<ul style="list-style-type: none"> • Students will be able to explain conceptual development and technological application of behavioral systems analysis, • Students will be able to describe conceptual, methodological, and technological strength and weakness associated with this approach, and • integrate themes and topics in behavior analysis that may contribute to the conceptual, methodological and technological development of behavioral systems analysis.
771	CLINICAL PSYCHOLOGY ETHICS AND PROFESSIONAL ISSUES	Introduction to professional ethics and standards in psychotherapy and research. Supervision and current professional issues will be considered. Prereq(s): Admitted to the clinical psychology program.	<ol style="list-style-type: none"> 1. In discussion and written work, critically apply concepts central to ethical decision making in psychology, including multiple relationships, privacy and confidentiality, and other ethical standards contained in the American Psychological Association Code of Conduct. 2. Conduct clinical intake interviews and demonstrate the ability to organize and write clinical intake reports. 3. Explain the non-specific factors identified in psychotherapy outcome and process research and demonstrate these fundamental clinical skills in clinical interview settings. 4. Explain and critique personality assessment methods.
772	ADVANCED SUPERVISION AND CLINICAL PRACTICUM	Supervised practice in psychotherapy for individuals with severe behavior disorders. Consideration of supervision techniques. Maximum of 12 credits. Prereq(s): Admission to the clinical psychology major.	<ol style="list-style-type: none"> 1. Identify and address ethical, legal, and personal challenges that occur during therapy and supervision. This includes such issues as mandatory reporting requirements and awareness of ethical challenges such as the inherent dual-role problem that could exist in supervisory relationships. 2. Explain the principles of adherence and competence in the practice of clinical psychology. 3. Demonstrate an advanced level of competency in applied clinical skills and develop repertoires for providing and receiving supervision that facilitates one's own and others' abilities.
773	CLINICAL PSYCHOLOGY HALF-TIME EXTERNSHIP	Includes half-time third-year externship as required by the clinical psychology program. Prereq(s): Clinical psychology major.	<ol style="list-style-type: none"> 1. Communicate professional knowledge regarding theory, models, and methods of practice and demonstrate skills essential for professional problem-solving in applied clinical settings, as evidenced by satisfactory ratings by site supervisors. 2. In discussions of readings and clinical work at their respective sites, students are expected to apply psychological assessment, intervention, and consultation skills at an advanced level of competency. 3. Explain the integration of theory, models, methods, practice, and ethics of consultation, including mental health consultation (client-centered case consultation, consultee-centered case consultation, program-centered administrative consultation, and consultee-centered administrative consultation), behavioral consultation, instructional consultation, hospital-based consultation, community consultation, the scientist-practitioner model of consulting psychology, and diversity issues in consultation.

774	CLINICAL PSYCHOLOGY FULL-TIME INTERNSHIP	Includes full-time internship as required by the clinical psychology program. Prereq(s): Clinical psychology major.	<p>1. Communicate professional knowledge regarding theory, models, and methods of practice and demonstrate skills essential for professional problem-solving in applied clinical settings, as evidenced by satisfactory ratings by site supervisors.</p> <p>2. In discussions of readings and clinical work at their respective sites, students are expected to apply psychological assessment, intervention, and consultation skills at an advanced level of competency.</p> <p>3. Explain the integration of theory, models, methods, practice, and ethics of consultation, including mental health consultation (client-centered case consultation, consultee-centered case consultation, program-centered administrative consultation, and consultee-centered administrative consultation), behavioral consultation, instructional consultation, hospital-based consultation, community consultation, the scientist-practitioner model of consulting psychology, and diversity issues in consultation.</p>
780	ADVANCED HUMAN PSYCHOPHYSIOLOGY LAB	Advanced laboratory course in human biopsychology techniques, introducing measures of neural function such as the EEG, EKG, autonomic and motor responses, and sensory evoked potentials.	<p>Students will be able to read and critically evaluate relevant scientific literature in the area of human psychophysiology. Students will apply at an advanced level of familiarity the scientific process by writing an experimental proposal, conducting an experiment, analyzing data, and presenting the results to the class.</p> <p>Students will be able to utilize techniques used in human psychophysiology experiments.</p>
783	BEHAVIORAL INTERVENTIONS	Methods of behavioral interventions for decreasing aberrant behaviors and increasing adaptive behavior (e.g. antecedent manipulations, extinction, differential reinforcement, punishment, and token economies) will be considered. Prereq(s): PSY 713.	<p>Upon successful completion of this course, students will be able to: 1. Prepare specific behavioral interventions for reducing behaviors maintained by positive social reinforcement, Negative social reinforcement, and automatically maintained behaviors. These interventions will include accurate description of target behaviors, use of preferred reinforcers, appropriate task analysis, appropriate shaping, fading and chaining methods, as well as manipulation of establishing operations. 2. All of these same methods for the acquisition of desirable alternative behaviors and / or for the acquisition of new cognitive, verbal, social and academic skills. 3. Indicate appropriate use when necessary of extinction, negative reinforcement, and punishment protocols.</p>
795	COMPREHENSIVE EXAMINATION	Course is used by graduate programs to administer comprehensive examinations either as an end of program comprehensive examination or as a qualifying examination for doctoral candidates prior to being advanced to candidacy.	Students will successfully complete the examination(s) relevant to their scholarly interests under the supervision of a faculty member.
797	THESIS		Students will successfully propose, conduct and/or defend research relevant to obtaining a master's degree under the supervision of a faculty member.
799	DISSERTATION		Students will successfully propose, conduct and/or defend research relevant to obtaining a doctoral degree under the supervision of a faculty member.
899	GRADUATE ADVISEMENT	Provides access to faculty for continued consultation and advisement. No grade is filed and credits may not be applied to any degree requirements. Limited to	Students will meet regularly with a faculty member for continuing advisement relevant to obtaining a doctoral degree.

		8 credits (2 semester) enrollment. For non-thesis master's degree students only.	
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Appendix III
 2016 Silver Core Objectives
 UNR Undergraduate Core Curriculum

Silver Vein I: Fundamental Practice

- **CO1 - Effective Composition & Communication**
 Students will be able to compose written, oral, visual, and other forms of discourse for a variety of scholarly, professional, and creative purposes.
- **CO2 - Quantitative Reasoning**
 Students will be able to apply quantitative reasoning and statistical analysis methodologies to understand and solve problems.
- **CO3 - Critical Analysis & Use of Information**
 Students will be critical consumers of information, able to engage in systematic research processes, frame questions, read critically, and apply observational and experimental approaches to obtain information. These skills will include the ability to 1) employ systematic methods to search for, collect, organize, and evaluate information, 2) critically evaluate the methods, context, findings, or arguments that produced that information, and 3) formulate conclusions based on their own analysis of the information.

Silver Vein II: Primary Areas of Focused Inquiry

- **CO4 - Physical & Natural Phenomena**
 Students will be able to explain the processes by which the natural and physical worlds are investigated, articulate basic principles used to explain natural phenomena, and apply the scientific process to real problems using observational or experimental methods.
- **CO5 - History & Culture**
 Students will be able to understand the processes by which past and present societies have been created and perpetuated through their history, ideas, and cultural products. Students will engage both historical and contemporary cultural texts through critical reading, analysis, and interpretation in the context of culture, society, and individual identity.
- **CO6 - Cultures, Societies, & Individuals**
 Students will analyze social/human conditions by systematically studying individuals, groups, communities, and cultures. Students will interpret, model, observe, or experiment, as means of inquiring into human problems.
- **CO7 - Artistic Composition, Interpretation, & Expression**
 Students will apply techniques of critical analysis to study and interpret works of art, dance, music, and theater in the context of culture, society, and individual identity. Students may also cast their interpretation in the form of creative expression.
- **CO8 - Constitution**

Students will demonstrate familiarity with the origins, history, and essential elements of the constitutions of the United States and Nevada as well as the evolution of American institutions and ideals.

Silver Vein III: Advanced Areas of Focused Inquiry

- **CO9 - Science, Technology, & Society**
Students will be able to connect science and technology to real-world problems by analyzing scientific data related to a problem of societal concern, be able to discriminate between sound and unsound interpretation of data, employ cogent reasoning methods in their own examinations of problems and issues; and evaluate the applications of science and technology in societal contexts.
- **CO10 - Diversity & Equity**
Students will develop a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of contexts. Students will engage in modes of analysis attentive to considerations of diversity and equity.
- **CO11 - Global Contexts**
Students will apply modes of academic inquiry, creative expression, or results of research to problems in historical and contemporary global contexts. Students will understand the connections among local, national, and international contexts and evaluate the ways that historical and contemporary global influences affect their current local situations.
- **CO12 - Ethics**
Students will evaluate the ethical principles in application of specialized knowledge, results of research, creative expression, or design processes. Students will demonstrate an ability to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, consider how ethical principles might be applied to ethical dilemmas, and consider the ramifications of various actions.

Silver Vein IV: Integrative Experience

- **CO13 - Integration & Synthesis**
Students will be able to synthesize and transfer learning to new complex situations.
- **CO14 - Application**
Students will be able to apply knowledge in both focused and broad interdisciplinary contexts.