

Departmental Base Budget Overview

Department **Letters & Science Dean's Reserve**

Executive **Provost**

Index **415011**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
85,741	1,280	26,449	305,161	138,306	172,099	259,308	140,969	802,805	414,096	800,364	833.47%

The L&S Dean's Reserve houses funds for:

1. In FY2005-FY2006, the UPBAC-funded Base increases (GTA stipend increases, GTA Base FTE increases and Base Operation increases) were briefly held in the Dean's Reserve and distributed to the departments in Fall 2005. Other funds in this Index typically come from vacant faculty lines within the college that are briefly held in the Dean's Reserve and re-distributed as faculty lines are filled.
2. On-going non-department specific commitments—these funds are committed for such things as the Women's Studies Program, partial GTA medical insurance costs (funded by UPBAC in FY03), and staffing of the University Core 2.0.

Departmental Base Budget Overview

Department **Microbiology**

Executive **Provost**

Index **415100**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
659,026	688,055	711,696	708,208	699,244	775,483	820,882	801,964	755,129	773,238	830,334	25.99%

Our department's primary mission is to train undergraduate, graduate and postdoctoral students for careers in microbiology. This training must be of the highest caliber and will be reflected in our graduates' future careers, future enrollment, alumni commitment and reputation. Our secondary (and related) mission is to conduct cutting-edge research in microbiology-related fields. In FY2006, the Department generated ~\$1.08 million in new research and sponsored funds. This is lower than in previous years due to the department's investment in new assistant professors. In addition, our Department Head is the principal investigator on the five year, \$16.6 million Montana INBRE program, involving Microbiology Faculty as mentors and providing continuing support for the department's genomics center, bioinformatics research and training laboratory and environmental health laboratory. Our genomics center, established initially through NSF and the Murdock foundation, has been extremely successful, and is in constant use by departments from around campus, representing approximately thirty different faculty groups, both on and off campus. The department has also been awarded \$4 million from the NIH to renovate the Cooley Microbiology Laboratories. At the time of graduation, 2007, we had 59 students in the Microbiology Option, 56 in the Medical Technology Options and 6 in the Environmental Health Option. We were responsible for 13 students in the Microbial Systems Option of the Biotechnology Program, and 12 students in the microbiology minor. There were 20 graduate students in the PhD program and 9 in the MS Program. We anticipate similar or higher numbers of undergraduates this coming year, after transfers our fully accounted for, as recruitment remains a major focus for the department.

Our base budget currently supports salaries for eight tenure track faculty, our director of medical laboratory sciences and a half time academic coordinator. This past year we successfully recruited a new faculty member in biofilm microbiology (Fields), with a joint appointment at the CBE. We have outstanding junior faculty in infectious disease, immunology and bioinformatics (Burritt, Halonen, Dlakic) critical disciplines in training today's microbiologists. They join senior faculty members Jesaitis, Franklin and McClure to form an excellent team for teaching and research in the biomedical sciences. Other critical programs include environmental microbiology, environmental health and epidemiology, and medical laboratory sciences (MLS). Three tenure track faculty members (Geesey, Ford and Fields) cover environmental microbiology and environmental health. We have also received state funding to expand our clinical laboratory sciences program to provide complete clinical training in-state to help fill the acute shortage of Medical Laboratory Scientists in Montana.

Microbiology is a unique discipline that affects every aspect of our lives, from infectious disease to production of the foods we eat. The discipline has received considerable national attention since the bioterrorist events of 2001. However, there has also been an increasing awareness of the field of emerging and resurgent disease, and the need for trained microbiologists to address the field (SARS, Avian Flu and West Nile are excellent examples). We therefore have active searches ongoing for senior hires in infectious disease and epidemiology. In addition, we are exploring a hire in archaeal genetics with the Thermal Biology Institute. The department's future plans therefore include

developing a faculty line in virology. The department represents a unique training environment for future microbiologists, with the opportunity for students to immerse themselves in the discipline, including work experience in leading research labs.

Departmental Base Budget Overview

Department **Chemistry & Biochemistry**

Executive **Provost**

Index **415200**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
1,567,853	1,613,633	1,765,066	1,788,902	1,706,795	1,813,802	1,840,017	1,868,395	1,835,247	1,949,826	2,014,948	28.52%

The Chemistry and Biochemistry Department provides for instruction, research, and outreach in several contexts. A large introductory chemistry program serves students in many disciplines and at several levels. Intermediate level courses provide for more advanced instruction for students requiring a deeper understanding of chemistry. Advanced undergraduate courses teach state-of-the-art knowledge to students whose career goals include the chemistry industry, professional or graduate education, and teaching. Courses at the M.S. and Ph.D. level prepare students to be leaders in education and industry. Productive, nationally competitive research programs are pursued by the faculty so that students can acquire the most modern knowledge and techniques. Active research programs also solve problems in the state and nation, lead to economic development, and provide other departments with the expertise that they need to advance their own programs. In order to accomplish the goals of the department, many activities are required of its faculty.

Departmental Base Budget Overview

Department **Ecology**

Executive **Provost**

Index **415300**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
1,158,549	1,152,292	1,294,693	775,943	876,388	915,348	869,815	981,752	1,027,172	1,105,381	1,084,992	-6.35%

Note: The 2001 Budget reflects the Dept. of Biological Sciences split to two separate departments: Dept. of Ecology and Dept. of Cell Biology & Neuroscience.

The Ecology Department provides undergraduate and graduate education and research that advance our understanding of the interactions between living organisms and their environments. This ecological knowledge is critical to the conservation and management of the State's resources, including fish, wildlife, plants and the ecosystems and landscapes that sustain them. Montana's natural resources are highly diverse and of substantial economic interest to the State; thus, our department's contributions have major impacts on many complex issues. Our educational and scientific contributions reach beyond the borders of Montana, however, and include innovative basic and applied ecological research in regional, national, and international issues. Recent research has shown that our faculty leads the world in ecological research in the Greater Yellowstone ecosystem.

The Ecology Department has one of the highest enrollments of undergraduates and the highest graduate student enrollment/FTE of any department in the College of Letters and Science (CLS), with approximately 282 undergraduate majors in four options, and 65 graduate students (currently 41 M.S., 24 Ph.D.) --- the largest research-based graduate program in CLS or Agriculture. The 12 tenure-track faculty members, two Federal cooperators, and three adjuncts in our department teach more than 2050 enrolled students during spring, summer and fall semesters, for a total of over 6300 SCH. Ecology teaches the largest enrollment biology course on campus (BIOL 101IN), and teaches three CORE 2.0 classes in total. The Ecology Department has the lowest relative expenditure per SCH or FTE of any department on campus. Our faculty advises an average of five graduate students per tenure track faculty member, comprising approximately 15% of all graduate students in the College of Letters and Science. Our teaching and research programs address issues that are central to the purpose of a land-grant institution, particularly to Montana. A large portion of the over \$2.8 million expended by our department on research each year is obtained outside of Montana and spent in Montana, often in remote locations. Thus, our highly active program provides direct economic benefits to many rural Montana communities. The quality of the faculty and the location of the Ecology Department make us highly competitive with peer institutions to meet the challenges of scientific inquiry and natural resource management in the 21st century. Consequently, the department has developed a strong national reputation for linking fundamental ecology with wildlife conservation and management, aquatic endangered and invasive species, and land use impacts on native ecosystems. This status is reflected by the fact that NSF funding is the second largest source of research funding in the department, and by our successful efforts to achieve a NEON site in the Greater Yellowstone.

Variation in the base budget since the split of the Biology Department is due to multiple retirements and the hiring of a new Department Head in 2004. A high departmental priority is to fill our existing open position and to add a new tenure track line to (1) teach required upper division courses currently taught by adjunct instructors, (2) expand and leverage the department research program, and (3) increase graduate enrollment. This will be partly accomplished in 2008 by the addition of one new faculty member and with the hiring of one new faculty member in Spring 2008.

Departmental Base Budget Overview

Department **Cell Biology & Neuroscience**

Executive **Provost**

Index **415350**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
0	0	0	362,695	474,952	532,837	685,098	699,688	755,173	851,890	809,611	

Note: The 2001 Budget reflects the Dept. of Biological Sciences split to two separate departments: Dept. of Ecology and Dept. of Cell Biology & Neuroscience.

Department Mission: The Department of Cell Biology and Neuroscience (CBN) performs three inter-related and complementary roles: undergraduate and graduate instruction, research and/or scholarship, and public service and/or outreach. The department offers two undergraduate curricular options: Biomedical Sciences, and Cell Biology and Neuroscience. The Cell Biology and Neuroscience option provides a general education in the biological sciences with an emphasis on cell biology, developmental biology, anatomy/physiology and neuroscience. The Biomedical Sciences option provides students with the necessary training to satisfy the entrance requirements of most medical, dental, and other health-professional schools and for graduate study in biomedically-oriented disciplines. The department also provides service courses through the New Core Curriculum, and to the College of Nursing, the College of Education, Health and Human Development and to several other departments and curricula. Many faculty in CBN also have substantial teaching commitments in the WWAMI program. The department offers both M.S. and Ph.D. degrees in Biological Sciences with an emphasis on neuroscience and developmental biology. Faculty in the department are recognized nationally for excellence in research and perform service responsibilities for their profession, for the state and for the university and by involvement in outreach/continuing education offerings. In FY 05, research expenditures for CBN totaled: \$7.2M.

There are 11 tenure track faculty and 1 permanent adjunct in the department: 9.55 FTE are in L&S and 1.80 FTE are in WWAMI. The department includes approximately 350 undergraduate students and 10 graduate students.

Significant changes to the budget: The base budget for CBN has increased \$26.7k for GTAs, \$15K to fund 0.59 FTE of our Accounting Associate (staff), \$10k for a change of FTE splits with the WWAMI program and \$10k for additional operations expenses. All other increases represent raises and promotions (Bradley to Associate and Lefcort to Full).

New contributions to undergraduate teaching: In 2002 MSU received a prestigious award from the Howard Hughes Medical Institute to revise and revitalize the undergraduate biology curriculum. This year we received another 4 year award to continue the process of revision, work towards a vertically integrated curriculum that will span the full four years of undergraduate education, and create a new teaching laboratory for upper level undergraduates who will be taking hands-on research courses in their junior and senior years. The department continues to develop new courses in response to student feedback on the senior survey, specifically this year we are launching a new laboratory course in biomimetics. We are in the middle of a three year National Science Foundation Research Experience for Undergraduates grant that is aimed at students in their freshman year with no research experience. This project, led by Anneke Metz, provided training for 10 students this summer; several of which were from other universities. Over 20 MSU undergraduates participated in funded summer research opportunities in 2005. Funds to support stipends and travel for these students were generated from grants from the NIH and NSF and HHMI.

Departmental Base Budget Overview

Department **Physics**

Executive **Provost**

Index **415400**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
1,345,868	1,380,610	1,507,043	1,429,520	1,465,281	1,577,437	1,527,372	1,588,208	1,533,517	1,614,997	1,675,167	24.47%

The Department of Physics is committed to providing the highest quality physics education to students in the Montana State University campus environment. Meeting this goal requires successful, nationally competitive, research programs that contribute to the body of physics knowledge, improve our understanding of science education, and forge links between fundamental knowledge and applied technology.

As a provider of instruction and student research opportunities in the most fundamental of the natural sciences, the Department serves

- students desiring Core or elective natural science credit
- students in professional fields who need a basic knowledge of the physical world
- undergraduate physics majors preparing for graduate work or employment
- masters and doctoral students pursuing advanced education and research

Research programs focus on optical science and technology; condensed matter physics and nanotechnology; astrophysics, relativity, and cosmology; solar physics and space science; and science education. All of these research programs enhance our instructional programs by directly involving students and faculty in problems and techniques at the frontiers of knowledge. We encourage profession-based outreach to the public schools, to local industry, and to professional organizations that support science and science education.

Departmental Base Budget Overview

Department **Earth Sciences**

Executive **Provost**

Index **415500**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
751,597	744,749	799,541	807,805	784,803	817,438	876,441	818,487	861,951	968,931	1,186,309	57.84%

The Department of Earth Sciences supports the broad land grant mission of the College of Letters and Science at Montana State University including undergraduate and graduate instruction, research, and service, offering undergraduate and graduate (Master's and Doctoral) degree options in the allied fields of Geology, Paleontology, Geography, Geohydrology, Snow Science and for the first time this year, a new option in Geographic Information Science/Planning. The role of the Department is to offer courses, conduct research, and provide service integrating geologic and geographic principles to better understand the Earth and its inhabitants. The department houses 15 faculty, 2 staff, 2 research associates, and 13 adjuncts, who work with 225 undergraduate majors, 35 Master of Science students and 15 Ph.D. students. The Department has two Goldwater Scholars.

Teaching is one of the Department's key missions at Montana State University. The Department faculty foster innovative and effective teaching in support of an integrative Earth Science view - a nationally emerging view of the Earth as a dynamic system comprising complex interrelations between the atmosphere, hydrosphere, biosphere, and surface and interior of the solid Earth, and humans. Student advising at the undergraduate and graduate levels is an important component of the Department faculty's service and commitment to students. Consistent with the role and scope of the College of Letters and Science, scholarship and creative activity are considered critical to advancing our understanding of the Earth system, and equally as importantly, vital components of undergraduate and graduate education.

Active research programs with continuous records of accomplishment are maintained in conjunction with teaching responsibilities by all faculty. The Department maintains and provides nationally and internationally recognized research emphases in the areas of Geographic Information Systems (GIS) through its Geographic Information and Analysis Center (GIAC; undergoing a transition), dinosaur paleontology through its close affiliation with the Museum of the Rockies, earth surface processes in conjunction with the U.S. Geological Survey Northern Rocky Mountain Science Center, geochemistry and surface science through its affiliation with the Imaging and Chemical Analysis Laboratory (ICAL), historical geography, biogeography, structure-tectonics, earthquake studies, volcanology, and hydrogeology through its close interactions with both federal and state agencies. Corporate sponsorship of instruction and research has increased dramatically. There is a new Center of Research and Teaching Excellence in Earth Sciences (CORTES) funded by Marathon Oil. British Petroleum and Exxon Mobil have contributed support for field-based teaching. The Department is working actively with the University to expand teaching-laboratory space in Gaines Hall by 2010.

Departmental Base Budget Overview

Department **GIAC Instructional**

Executive **Provost**

Index **415501**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2007	10-Year % Change
0	0	0	0	0	0	0	0	53,592	55,033	47,316	

NOTE: As of FY2006, moved from Index 4R1270.

The Geographic Information and Analysis Center is a Montana University System Center. The Center is in transition with a proposed name change to the Spatial Sciences Center. An interim director (Rick Lawrence) has been appointed. The instructional component of the Center continues to be an important function and currently supports four classes in Earth Sciences, four classes in Land Resources and Environmental Sciences, and two courses in Ecology. The FTE supports two GIAC staff (0.33 FTE support for a GIS specialist and 0.75 FTE support for a systems administrator). The GIS specialist provides course support as well as research support in the Center. The systems administrator provides all systems support for the Center computer lab, which supports the courses listed above. GIAC staff collaborates with research and teaching faculty, and provide technical expertise in GIS, Remote Sensing, GPS, spatial data analysis, and dedicated systems support to undergraduate and graduate students, faculty, and staff on campus. The GIAC staff also maintains a large network of PCs and Unix workstations dedicated to GIS, GPS, and Remote Sensing instruction and research. This network includes GIAC, the Remote Sensing lab, the GPS lab, Land Resources and Environmental Sciences, and the servers for the Greater Yellowstone Area Data Clearinghouse and Montana Local Government GIS Coalition.

The staff also manages and maintains the content of two web-based information and data clearinghouses: the Montana Local Government GIS Coalition community web site and the Greater Yellowstone Area Data Clearinghouse, which is a regional node for both the National Spatial Data Infrastructure and National Biological Information Infrastructure. The Center also serves spatial data using ArcIMS for the Montana GeoScience Data Project, for Ethanol-Plant-Site Analysis for agriculture and for Septic Suitability Assessment for part of Gallatin County. Digital OrthoPhoto Quadrangle, DEM and image data collections are also available on line. Additionally, GIAC staff and the Interim Director are active in the Montana GIS Community, representing MSU and the University education system on the Montana Land Information Advisory Council, the Montana InterAgency GIS Technical Working Group, the Montana Association of Geographic Information Professionals, and the Montana GIS Users Group. The Center also leads MontanaView, a statewide consortium of universities, agencies, and non-profit entities advancing education and other activities related to spatial sciences throughout Montana.

Departmental Base Budget Overview

Department **History & Philosophy**

Executive **Provost**

Index **415600**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	9-Year % Change
931,158	967,764	945,077	941,598	977,648	1,043,048	1,074,591	1,116,997	1,165,743	1,239,121	1,350,457	45.03%

The Department of History and Philosophy offers B.A. degrees in History and Philosophy. The Department also offers M.A. and Ph.D. degrees in History, with emphases in the history of science and technology, environmental history, the history of the American West, and public history. The Department offers five major options, including History, Teaching, Japan Studies, Religious Studies, and SETS (Science, the Environment, Technology, and Society). The Department is also home to several non-teaching minors, including Museum Studies and Latin American and Latino Studies, and plays a major role in the Liberal Studies, American Studies, and Women's Studies programs. In the heart of Yellowstone country, the Department facilitates student exploration and discovery of our region, but the Department also provides a gateway to areas beyond Yellowstone, with courses of advanced study related to South Asia, East Asia, Latin America, Europe, the Islamic world, and the ancient world. Internships at historical societies, museums, and Yellowstone are also an important part of the educational experience. In short, our primary mission is to offer the highest quality instruction to MSU students.

The Department provides students with the tools to think rigorously, to research and thereby generate knowledge empirically, and to articulate their thoughts coherently. For these reasons, the Department's programs are among the most sought-after majors in the College of Letters and Science and even across campus. In the Spring Semester of 2007, we had 230 majors in history and 37 in philosophy, and 29 graduate students in our history graduate program, specifically 19 M.A. students and 10 Ph.D. students. With the advent of Core 2.0, the Department continues to offer a large share of Humanities Inquiry, Contemporary Issues in Science, Research, and Diversity Core courses. The centrality of the Department to the core teaching mission of the university is unparalleled.

The Department's centrality to the university's research and outreach mission is equally unparalleled. The Department organizes and funds two major public lectures that have become fixtures in the community, the Stegner Lecture and the Hausser Lecture, which bring eminent scholars to Bozeman to give popular presentations that are free and open to the public. In April 2008, this will include a lecture by Dr. Jane Goodall at the Brick Breeden Fieldhouse. Members of the Department continue to collaborate with the Bozeman Public Schools on implementing its Teaching American History Grants—awarded through the U.S. Department of Education. The Department is also in its first year of a three-year National Science Foundation grant to investigate copper mining in Montana and Japan. In addition, Department faculty members continue their successes in publishing books and securing internal funding. Faculty receive Scholarship and Creativity Grants from the VPR, BEST Awards from the Provost and Vice President for Research, and Research and Creativity Awards from the College. As an example of its national reputation for scholarly excellence, the Department plans to continue to organize Michael P. Malone Memorial Conferences. The Fifth Annual Conference, titled "Japan's Natural Legacies," will be in Fall 2008 and supported by the College and Japan Foundation, New York, funding; the Sixth Annual Conference will be jointly funded and organized with Stanford University.

Finally, faculty members continue to carry a heavy service load in terms of university committees, professional responsibilities, and civic engagement. To cite only a few examples: faculty from the Department have been centrally involved in the University Promotion and Tenure Task Force, Diversity Steering Committee, Faculty Affairs, Undergraduate and Graduate Studies Committees, Scholarship and Creativity Committee, and multiple other committees. They direct such programs as Liberal Studies, American Studies, and Women's Studies and, thereby, provide critical leadership in the humanities at MSU. They collaborate across disciplinary lines, with philosophy faculty working with scientists to explore ethics in the sciences at MSU. Faculty members have been active on professional boards, including the THE PACIFIC PHILOSOPHICAL QUARTERLY; and, faculty members have served on the Montana Historical Society Board of Trustees and on the Livingston Hospital Ethics Committee.

Departmental Base Budget Overview

Department **Regent's Professor**

Executive **Provost**

Index **415610**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
12,480	12,455	12,455	12,455	12,455	12,455	12,455	12,455	12,455	12,455	12,457	-0.18%

The Regents Professorship, held by Professor Gordon Brittan, is the highest honor the Board of Regents can bestow on faculty at this university. In this case, it recognizes Professor Brittan's international reputation for his work on Kant and Descartes. More than this, it recognizes Professor Brittan's reputation for distinguished teaching and his unequaled commitment to public service. Indeed, it is worth noting that Prof. Brittan received the first annual MSU award for Distinguished Service.

Departmental Base Budget Overview

Department **Mathematics**

Executive **Provost**

Index **415700**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
1,731,935	1,804,954	1,897,943	1,893,099	1,954,773	2,243,469	2,295,407	2,282,589	2,351,906	2,382,213	2,506,904	44.75%

Overview: The Department of Mathematical Sciences is one of the leading departments in mathematics, mathematics education, and statistics in the Rocky Mountain region. The department offers B.S., M.S., and Ph.D. degrees in applied mathematics, mathematics, mathematics education, and statistics. Graduates are following careers in industry, government, and academia. We have 107 undergraduate majors, of which 5 are Presidential Scholars and 13 are in the Honors Program, and 108 graduate majors. In 2006 we awarded 27 B.S. degrees, 21 M.S. degrees, and 4 doctoral degrees. In spring, 2007 we granted our first M.S. in Ecological and Environmental Statistics.

Relation to the University: The department has a multifaceted role on and off campus and is a core contributor to research and teaching missions across campus. **Teaching:** We have the largest instructional component on campus, teaching about 10% of the total student credit hours that are delivered by MSU at a cost per student FTE that is the fourth lowest of all departments at MSU. These credit hours are delivered in over 300 department courses. The departmental teaching role supports the core curriculum, business, engineering, nursing, and science programs across campus, as well as our own program. The quality of our instruction at all levels is maintained by faculty that are as excellent in the classroom as in their research. Faculty in our department have received numerous teaching awards, including the Cox Faculty Award for Creative Scholarship & Teaching, the President's Excellence in Teaching Award, the Alumni Association/Chamber of Commerce Awards for Excellence in Teaching, and the CLS Outstanding Faculty and GTA Awards. **Research:** Our teaching mission is complemented by outstanding research programs. The number of research publications produced by our department nearly doubled this year. Interdisciplinary research programs involve the Big Sky Institute, CBE, CCB, CLTW, Interagency Grizzly Bear Study Team, Northern Yellowstone Carnivore Working Group, SIMMS, Whitebark Pine Monitoring Working Group, and WTI. Cooperative on-campus research programs involve the departments of Agricultural Economics & Economics, Animal & Range Sciences, Cell Biology & Neuroscience, Chemical Engineering, Civil Engineering, Earth Sciences, Ecology, Education, Land Resources & Environmental Sciences, Nursing, Physics, and Psychology. Ongoing external research affiliations include Argonne National Laboratory; Los Alamos National Laboratory in Los Alamos, New Mexico; Maui Space Surveillance System and the Maui High Performance Computing Center, both on the island of Maui, Hawaii; the Hilo Observatory in Hilo, Hawaii; the Montana Department of Transportation; the National Park Service in Yellowstone; the Pacific Northwest National Laboratory in Richland, Washington; the Center for Adaptive Optics at UC-Santa Cruz; the US Fish & Wildlife Service; and the US Geological Survey. Clearly our research impacts the University's research mission at its deepest levels. **Service:** Our faculty consult on research projects across campus and provide professional development training for in-service teachers.

Significant Changes to Budget: In FY03, a longstanding commitment from the Provost's Office of \$150,000 to appropriately fund the delivery of MATH 105 was permanently put in our base budget. This explains the major portion of the increase in our base budget from FY02 to FY03. In FY06, funding for 18 extra sections (all of which had been delivered for 10 years or more) totaling \$100,000 was finally made a permanent part of

our base budget. Thus \$250,000 was continually used over the years to deliver these courses to thousands of students, yet it was not in our base budget. If these funds had been in our base all that time, our 10-year % change would have been merely 26.49%.

Departmental Base Budget Overview

Department **Psychology**

Executive **Provost**

Index **415810**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
543,693	558,852	588,294	536,354	583,672	613,580	632,185	643,306	500,333	643,668	678,331	24.76%

Psychology is the scientific study of behavioral and cognitive processes, including applications in society. The mission of the Department of Psychology at MSU is to promote exploration, discovery, and dissemination of psychological knowledge, to provide an environment in which scientific discovery and learning are integrated and valued, to provide challenging and diverse learning opportunities in support of student success, and to serve the people of Montana by sharing our expertise and collaborating with others. Students of psychology influence many aspects of life. They enhance the well-being of individuals and families, manage businesses and organizations, help build communities, and assure the effective functioning of the nation.

The Department of Psychology offers a B.S. degree that prepares students for employment in applied settings or for graduate study in psychology and related fields or professions, such as medicine, law, and business. The undergraduate curriculum emphasizes theories, terminology, methods, and research findings. In AY2006-07, we awarded 41 B.S. degrees. We also offer a M.S. degree that trains graduate students to enter a Ph.D. program or to conduct psychological research in private and public organizations. A strong program in psychological science is essential to our efforts because it helps us attract and retain high-quality faculty, provide advanced training opportunities for students, and enhance the research experiences of our undergraduate students. In AY2006-07, we awarded 6 M.S. degrees; 5 of these graduates are now in highly rated Ph.D. programs, and the other is gainfully employed at Zoot.

Psychology currently has 7 tenure-track faculty (compared to 8 tenure-track faculty in the mid-1980s). Two of our current faculty (Dr. Jessi Smith and Dr. Michelle Meade) are relatively new to the department, having joined in Fall 2006.

Psychology currently serves about 230-240 undergraduate students and 12 graduate students. On average, each faculty member advises about 30 undergraduate students and 2 graduate students. We also provide two large-enrollment core courses to the university community: Introductory Psychology (PSY 100IS) and Contemporary Issues in Human Sexuality (PSY 201D). Nine psychology courses are part of a teaching minor and a component of the elementary education program accreditation in the Department of Education. Undergraduate FTEs increased over last year. Our program is also very cost effective: The average expenditure of instructional dollars per undergraduate SCH (about \$170) is about 70% of the average (about \$240) for comparable psychology departments.

In addition to teaching, Psychology has continued to show steady growth in external funding. For example, Dr. Keith Hutchison recently received nearly \$300,000 in grant support from NSF. Psychology faculty serve on university committees such as the Institutional Animal Care

and Use Committee. Faculty review for many professional journals and are members of several professional organizations. In 2007, the 7 tenure-track faculty published 10 peer-reviewed journal articles (through October, 2007), and about 5 are "in press" (as of October, 2007).

Departmental Base Budget Overview

Department **Modern Languages**

Executive **Provost**

Index **415820**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
369,963	375,146	438,528	448,093	465,759	495,368	457,576	475,538	540,908	505,131	523,554	41.52%

Presently, we have 7 tenure track positions, with an expected hire in Japan Studies in FY08, one visiting professor in German, and 9 adjunct faculty teaching from 30 to 50 classes depending on tenure-track leaves, sabbaticals, and course releases. We also have one retired faculty member serving as coordinator of our language resource center. (Our base allocation does not include complete funding for the cost of our adjuncts and extra sections, a cost which varies between \$75,000 and \$110,000 per academic year.) The Modern Languages & Literatures Department curricula are central to the University's goals of "emphasizing the centrality of the liberal arts and sciences to undergraduate education; fostering interdisciplinary educational opportunities; developing critical and creative thinking, effective communication, and multicultural and global awareness." Our courses prepare students to enter graduate school, the foreign language teaching profession and international business and industry.

We have a Commerce option that combines language study with course work in the College of Business and other departments in the College of Letters and Science. We added Japanese in AY2000 (as part of the Japanese Studies minor) and first-year Arabic as a distance learning program through the Office of International Programs. Based on student comments, enrollment figures, and growing interest, we anticipate the need for additional faculty in Spanish and Mandarin. We recently received approval for the Latin American and Latino Studies minor created in conjunction with the Department of History. Language departments have seen an increase in overall enrollments over the past ten years with no sign that this trend will end. Our department reflects those increases in every language area, especially Spanish. The growing demand for Spanish continues to tax our resources as we attempt to respond to the large numbers of students who want to fulfill their language requirements or complete their majors without delaying their programs. At this point in time, a fourth hire in Spanish has become the department's highest priority.

Overall, the department has more than doubled the number of degrees granted over the past 15 years and this figure does not include students who have declared a second major in one of our languages or the numerous minors. Currently we are directing our efforts toward the development of intern/service opportunities abroad in conjunction with our various MSU-sponsored Study Abroad Programs. In addition to the persistent pressure for increased offerings in Spanish, the demand for greater understanding of other cultures and languages in the wake of world events of the past few years cannot help but increase demand for all of our programs.

Departmental Base Budget Overview

Department **Political Science**

Executive **Provost**

Index **415830**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
327,657	335,652	358,120	361,256	369,246	388,368	395,014	364,053	426,040	459,505	440,604	34.47%

The mission of the Department of Political Science is threefold. First, the Department provides quality undergraduate education in Political Science and graduate education in Public Administration. Second, Department faculty engage in research and creative activity contributing to the general advancement of knowledge about the human condition and human institutions, to the growth of knowledge in the field of political science and allied disciplines, and to the development of empirical and applied knowledge that serves to meet the knowledge and professional needs of the state and local governments. The needs of state and local governments are met not only through applied faculty research, but through the outreach, training, and public education efforts of the Local Government Center. Finally, faculty members serve the community by offering their time and expertise to the media and public interest groups.

The Department serves both its own majors (approximately 130 in Fall 2007 semester) and the broader student and university community by teaching a variety of courses that can be used to fulfill University Core requirements in Social Science. Additionally, students from other majors and colleges, such as those specializing in the social science broad field in the College of Education, are required to take a number of political science courses. The Department has experienced an increase in majors of approximately 50% over the past two years. The Department is expanding its internship program to include positions in local public interest advocacy organizations, aides to the Montana Legislature when in session, and working with the Senate Finance Committee and the offices of Montana's congressional delegation in Washington, D.C.

The Master's in Public Administration program currently has 20 students enrolled and actively pursuing degrees, and confers, on average, eight graduate degrees each year, with most graduates going on to public sector employment, and most often in the state of Montana. The Professional Paper requirement completed by all students during their last semester of the program often provide the link between the academic and professional practice experience, and many address topics of concern specifically to public policy issues we face in Montana.

The Department employs seven full-time tenure track faculty, one full-time faculty on a Regent's Contract who also serves as Director of the Local Government Center, and several adjuncts who teach additional sections of University Core courses, or, as needed, to replace tenured or tenure-track faculty on leave. The Department has proposed four courses for the New Core 2.0 – two Inquiry Social Science courses, one Diversity course, and one Research and Creative Experience course. The Department's Senior Capstone course (Pols 460) provides students with applied research skills and is required for all graduating seniors, including approximately 30-35 students per year for each of the past two years. The topics of research projects frequently have direct bearing on the employment or post-graduate studies undertaken by students upon graduation from MSU.

Departmental Base Budget Overview

Department **English**

Executive **Provost**

Index **415840**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
906,588	918,087	984,780	995,272	1,045,048	1,084,384	1,055,677	1,101,125	1,132,152	1,349,018	1,188,187	31.06%

Departmental Mission: The Department of English constitutes a core academic discipline and contributes to the mission of the college, the university, and the state of Montana through its instructional, research, and service and outreach roles, activities that are closely intertwined.

Relation to University: Instruction in English has been part of MSU since its founding as a land-grant college in 1893. The third article of the "Rules" for the college specifies that the "leading features of the course of instruction" shall include "the English Language," interpreted as composition, rhetoric / language, and literature. English still constitutes a core discipline, with its courses in composition and literature recognized as important parts of the university core and its programs in both literature and teaching acknowledged as essential to any university.

Services Provided: The Department of English offers a focused undergraduate program for majors and minors who aspire to enter careers in higher education, secondary education, and a broad range of professions. Additionally, the Department contributes to liberal arts education through core courses and other offerings in literature, language, and writing. Through its oversight role and ongoing collaboration with the Writing Center and the writing-across-the-curriculum program, as well as its instructional program in writing, the English Department supports the University's commitment to develop and foster the writing and critical thinking skills of students. Consistent with these objectives, the Department offers undergraduate majors in both Literature and in English Teaching, and minors in three options: Literature, Writing, and Teaching. Graduates from the English Teaching Option take up positions as secondary school teachers throughout the state and the country. Graduates from the Literature Option successfully enter graduate schools to pursue advanced degrees, secure good jobs in editing, publishing, and business, or pursue other vocations for which their English degree has well prepared them. Additionally, the department has taken the lead in developing state writing standards to be used for state-wide assessment of student writing at a variety of levels. The department also offers an MA in English, a unique, broad-field degree that focuses on the interconnectedness of writing, teaching, and literary studies. Although only seven years old, this program has grown rapidly to more than twenty students a year. It offers GTA positions to approximately fourteen students each year. In terms of numbers, the department offers composition to thousands of MSU-Bozeman students each year, fills many sections of literature core courses, has hundreds of undergraduate majors, and has a growing MA program. Its faculty has earned a local, national, and international reputation for excellence in scholarship and teaching. Demand at both the undergraduate and graduate levels is strong. Continued growth is currently limited only by number of faculty.

Departmental Base Budget Overview

Department **Native American Studies**

Executive **Provost**

Index **415850**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
207,363	216,230	230,653	233,072	239,690	256,407	264,766	270,321	325,648	402,865	399,272	92.55%

Native American Studies (NAS) is central to Montana State University's mission; specifically "MSU is committed to enhancing educational and professional opportunities for all protected classes and has a special dedication to the developing progressive options for Montana's Native American population."

NAS has developed a first class retention program for Native American students over its 30-year history. (It should be noted that, without NAS involvement in recruitment, New Student Services acknowledges a decline in Native American student enrollment between 1998 and 2000.) NAS has recently committed to once again help recruit Native American students for MSU. As a result of recruitment efforts, the Fall Semester 2007 Native student enrollment is approximately 315, the largest ever Native student enrollment at Montana State University. The Master's of Arts in Native American Studies is currently in its eighth year and has an enrollment of 10 students (plus 1 non-degree).

NAS has been one of the "work horse" departments of MSU for the delivery of Core courses needed by students to graduate. NAS courses serve pre-service education majors who are mandated by State law to take coursework that enhances their understanding of the unique cultures and history of Montana's Native people (*Indian Education for All*).

For the last decade, NAS has worked hard to assist other departments and colleges at MSU to secure extramural funding in support Native American students, the University, and the state. This effort has meant millions of dollars for our university and state. NAS, after 30 years of development, is one of the top 5 Centers of its kind in higher education and is now a model emulated and studied by other universities wishing to extend services to the Native Americans in their respective state.

NAS established one of the first Endowed Chairs in NAS in the United States and recruited Henrietta Mann, one of the premier scholars and leaders in Native American Studies, to fill it. This year, the Department named her successor, Bill Yellowtail, former Montana State Senator and a past Regional Director of the Environmental Protection Agency.

To further enhance the services benefiting Native students at Montana State University, Native American Studies sought and received authorization to build an American Indian Student Center. The site for the \$8 million Student Center is at the eastern edge of MSU's Centennial Mall, south of Hannon Hall. NAS has, at the same time, launched a \$2 million scholarship campaign.

Departmental Base Budget Overview

Department **Sociology**

Executive **Provost**

Index **415900**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
527,104	541,872	577,424	570,489	583,620	613,173	577,069	625,092	541,766	658,541	663,995	25.97%

The department offers Bachelor of Science degrees in Anthropology and Sociology and presently has 205 majors. Our research-active faculty provide students with a high-quality undergraduate education about the society and culture of which they are a part. This includes multi-cultural understanding and appreciation for different ways of living, the intricacies and subtleties of other ways of thinking, and variations in rules of social interaction and social structure. Through rational inquiry, logical thinking, critical analysis and careful reading of primary sources, Sociology and Anthropology confront the enduring questions humankind faces as we look to the future. Our instructional efforts are closely linked with research activities: We emphasize students' independent discovery of knowledge, and every major engages in at least two independent research projects before graduating. .

Department faculty have been very productive researchers despite having no graduate program. Over the past three years, they have published 2 books, 12 book chapters, 24 peer-reviewed articles, and given 31 papers at professional conferences. Over the same time period, faculty received 11 internal grants including support from the VPR Scholarship & Creativity Fund, and served as PI on 7 external grants, including funding from the National Science Foundation, the Japan Foundation and the Bureau of Land Management. In addition, faculty served as Co-PI on 7 external grants. Faculty have submitted applications for external funding to the NSF, the Bureau of Land Management and the American Educational Research Association. Current faculty research activity is focused on understanding prehistoric hunter-gatherer peoples in Montana, the origins of domesticated agriculture in Jordan, structural causes of organizational deviance, the adaptive strategies of Marshall Islanders who have taken up residence on the Big Island of Hawaii, human resources workers and legal consciousness, police organizational predictors of drug arrest rates, sibling violence, economic and social aspects of transnational families, the backlash against democratic reforms in post-WWII Japan, and the effects of race and class on schooling and crime. Overall, the department is developing significant strengths in the areas of global and international studies, social inequality and family. In addition, Project Archaeology – a national program of the Bureau of Land Management that is housed in our department –provides opportunities for faculty and students to be active in grant-funded curricular development related to archaeology.

Within the University, our faculty continue to participate in CORE 2.0 including membership on and/or chairing steering committees that evaluate new core course proposals; the delivery of innovative inquiry, diversity, contemporary issues in science, and research and creative experience courses; and teaching the University Seminar. In addition, faculty have taught Liberal Studies Seminars and Capstone courses. Department faculty sit on several important College and University committees such as P&T and Grievance and also contribute their service to the community. The social milieu in which the department operates often blurs the distinction between research and service in that results of

research are frequently found in applications. For example, our faculty have been involved with the design of data management systems for the state courts and the Local Government Center and have participated on the Community Corrections Board of Gallatin County.

Departmental Base Budget Overview

Department **GIAC Instructional**

Executive **Provost**

Index **4R1270**

Program **01**

Base Budgets:

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	10-Year % Change
0	40,675	42,935	43,966	50,017	52,828	52,317	52,601	0	0	0	0.00%

NOTE: As of FY2006, moved to Index 415501.