

Athabasca University 

Canada's  Open University™

# **University Research Plan 2002 - 2005**

**Version 5**

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*We value scholarly research....*

*We engage in reflective practice through the scholarship of  
discovery and the scholarship of teaching.*

(Athabasca University Strategic University Plan 2002–2006)

## **1. Introduction**

Research is of paramount importance to Athabasca University (AU) in promoting its mission as a leading open university. This includes research in all subject areas in which the University is offering programs. Through research, our teaching is informed, the University's reputation is advanced, and significant contributions are made to Canada's cultural, scientific, and professional development. A broad-based research agenda is the hallmark of a quality university, and AU has a mandate, as well as a recognized leadership role, in research in open, distance and e-learning.

Each AU academic with research responsibilities should be involved in substantive research activities in her/his field and/or in the scholarship of teaching. The University endeavors to support an open and creative research environment in which academics are supported in their investigations and studies.

Research income from external sources is essential for supporting such research. In this context, this plan calls for increasing funding from internal as well as federal, provincial, and private sources.

## **2. Context for the University Research Plan**

This University Research Plan (URP) is based on previous research planning documents and is linked to the research goals identified in the Strategic University Plan 2002 – 2006 (SUP). In particular, the following sections of the vision statement from the SUP are relevant to this URP:

*Athabasca University, Canada's Open University™, is the premier open and online university in North America and is acknowledged to be one of the leading universities of its kind in the world.*

*At Athabasca University, per-faculty-member research contributions are in line with relevant university norms. AU's profile in research in open and distance learning and related areas is one of the best in the world.*

The following long-term research goals are suggested by this vision. AU will: continue to encourage an active university research culture; provide research training to academics, professionals and graduate students; raise the public research profile of the University; promote interdisciplinary research groups within the University; assist new researchers to establish a research record; develop research partnerships with other institutions; increase income from research funding bodies; and support creativity in the arts and sciences.

The success of these long-term research goals will be evaluated by measuring increases in the quality, quantity, and importance of AU research. The following measures will be included:

- amount and types of research funding (SSHRC, CFI, Fulbright, etc.);
- number of conference presentations, book chapters, book publications (edited or written);
- refereed journals, and other publications;
- number of citations of AU academics' work;
- number of active AU researchers;
- number of research awards and other external forms of recognition;
- amount of press coverage of AU research;
- number of applications for funding;
- number of publications by all academics and professionals; and
- number of creative works produced.

***The relationship of research to the university mission***

The AU mission statement includes the following:

*Athabasca University, Canada's Open University™ is dedicated to the removal of barriers that restrict access to, and success in, university level studies and to increasing equality of educational opportunity for adult learners worldwide.*

*We are committed to excellence in teaching, research and scholarship, and to being of service to the general public.*

While individual academics are encouraged to pursue their research interests without institutional restrictions, a number of research themes have emerged that are best described as “mission-related”. These include themes that stress “removal of barriers” to educational opportunity and more broadly to opportunities to participate fully within society, since the latter barriers have a significant impact on the goal of creating full educational opportunities for all. Among the barriers to opportunity that our researchers study, the impact of gender, social class, ethnicity, and economic and social inequalities among different regions of the world figure prominently. Inevitably, when researching potential solutions to such inequalities, some of our researchers focus on techniques, both organizational and technological, meant to increase opportunity, while others focus on the need to change social structures, both material and discursive. As in any other university, there is a healthy dialogue among researchers approaching the same broad issues from different research paradigms.

AU has more than doubled its enrolments between 1995 and 2000, and has expanded its graduate and professional education offerings. Our enrollment increases have been Canada-wide, reflecting the increasing popularity of distance education as a means of completing all or part of a university degree and AU's excellent reputation as a provider of distance-and on-line learning. As a result of

this rapid growth, we have to find more and more effective ways of supporting learners. This provides unparalleled opportunities for *Canada's Open University*<sup>TM</sup>, one of which is to expand our research agenda to match our increasing teaching profile within Canada's post-secondary system.

***Factors guiding the development of research at AU***

*1) Humanities and Social Science Research*

AU is particularly committed to supporting research and promoting research excellence in these areas, which are so important to the social order, and to increasing our understanding of the economic, socio-political, cultural, historical, professional, and artistic framework in which knowledge is created and applied.

*2) Interdisciplinary Research*

AU supports interdisciplinary research, paying particular attention to initiatives that cross the borders of conventional disciplines such as the professions, sciences, and the arts. Interdisciplinary research helps to enlarge research contexts and paradigms to generate new ways of thinking.

*3) Research on the Scholarship of Teaching and Learning*

With its unique mission as a distance education institution, we possess unique knowledge about teaching online across diverse subject areas and the response of students. AU aims to become a world leader in research on the online teaching of different subjects and the response of students.

*4) Fostering Innovation*

AU will support pioneering original and creative projects in all subject areas.

**Collaboration in Research**

AU collaborates with organizations, governments, industry, and other post-secondary institutions in Canada and elsewhere to enhance our research efforts. In line with its open mandate, AU will encourage collaboration in learning industry-related initiatives that will help enhance opportunities for the dissemination of learning.

**Graduate Programs**

AU will expand its research capacity through its graduate programs. In addition, AU will establish a doctoral program with the intention of strengthening the research capacity in a variety of fields.

**Research in Open, Distance and E-learning**

Such research is critical for the future development of AU and for the future of learning in Canada and internationally.

**3. Current Research**

AU has identified strengths in interdisciplinary research in environment and sustainability; globalization and technology; the changing workplace; indigenous education; labour education; Canadian studies; and health studies. AU has also identified the following theme areas. They by no means exhaust the fields that link the research of scholars within AU. They represent simply the areas that, at the moment provide a research focus, having salience for the University's mission. These can be added to, altered and adjusted to fit the changing needs of the University. More emphasis may be placed on specific themes for defined purposes.

***Themes***

The following strategic areas have been identified:

*Theme One: Space science and astronomy*

The rural location of AU lends itself to a situation where astronomical data collection is ideal. It is in a region where the aurora is common, along with other northern sky phenomena, and facilitation of magnetic and radio observations is outstanding. The AU Geophysical Observatory project includes the installation of a sky imager to study the aurora borealis, exploiting Athabasca's unique northern geophysical location for observing global phenomena. Currently, existing alliances of our research academics with key players in this field at major research universities in the United States and Canada have generated data that are critical for the understanding of space science and astronomy in Canada. Expanded research interests in this area would be of significance in the contribution of AU to space research.

*Theme Two: Interdisciplinary research in environment and sustainability*

This theme would build on work done by social scientists, scientists, and humanists at AU. Themes include globalization and sustainability; environment and health; environmental rights; conservationists and ecological principles, practices and policies; environmental values and public participation; traditional knowledge, particularly ethnoecology; the boreal ecosystem; scientific study of the Athabasca River basin; environmental sciences, technology and education.

*Theme Three: Globalization*

AU researchers are engaged in research on several key sub-themes here. One is "Globalization, Technology and Culture," which focuses on the impact of technology, particularly the Internet, on global politics and global culture. This includes research on the ways in which global communications have linked radical social forces in various countries to work together on campaigns to frustrate an "international corporate agenda," and the contradictory impact of technological forces on efforts by former colonies to identify and reclaim elements of pre-colonial culture.

*Theme Four: A Changing workplace/Workplace and community education*

Research is ongoing at AU. There is research on the changing nature of work, changing working relationships, new business processes, labour relations changes, new philosophies of human resource management, organizational restructuring, contingent work, and throughout all these changes, the impact of technology.

*Theme Five: Indigenous education*

Research here has a focus on asserting traditional First Nation culture and laws in a context of coexistence with the mainstream Western-based society that has been establishing itself within First Nation territory over the past 400 years. It includes, among other topics, research on Aboriginal ways of knowing and passing on knowledge from generation to generation, on Aboriginal environmental knowledge and its importance to goals of environmental sustainability, and on the creation of integral programs of Aboriginal knowledge within a framework of Western-based educational institutions. It also includes law and government of First Nation peoples—working with traditional leaders and Elders to determine the traditional roots of contemporary understandings, self-determination, and sovereignty.

*Theme Six: Health research*

AU has a strong focus regarding nursing and health studies research that spans various Centres/disciplines. Research is underway or planned in nutrition, nursing practice, psychological and social issues related to online learning, assistive technologies, disabilities and other related topics.

*Theme seven: Labour/Canadian studies*

Labour/Canadian Studies is an interdisciplinary field, which draws on history, sociology, political economy, women's studies, industrial relations, and other fields in assessing the place of labour and working people in society. Researchers are working with partners in the labour movement to assess the problems and possibilities of online communications for labour education.

*Theme eight: Open, distance and e-learning*

The Centre for Distance Education, which offers AU's Masters in Distance Education, devotes its research effort to the broad field of open and distance education. Students are involved in this research wherever possible.

Distance education and on-line learning research, a cornerstone of the University Research Plan, is distributed broadly among the academic staff at the University. This reflects the fact that professors who are practitioners in distance education are keen to study the factors that contribute to success and failure for students. By way of example, Dietmar Kennepohl's *Remote Access to Instrumental Analysis for Distance Education in Science* project is allowing chemistry and physics students to remotely access and control analytical instruments to conduct real computer-interfaced science experiments through the Internet.

Project management in distance education is a special area of emphasis for Athabasca University. Project management has often been identified as a critical enabler reducing costs, cycle times, and risks of failure while promoting teamwork and communication and streamlining processes and the monitoring of progress in course development as well as in the delivery of distance education programs.

The emphasis on a national learning object metadata repository by the Canadian Network for Advanced Research for Industry and Education (CANARIE), Industry Canada and others is particularly exciting. As a lead partner in the recently approved EduSource CANARIE project, AU is positioned to be the Canadian leader in the creation and delivery of learning objects for courses at the post-secondary level.

Success and failure in such projects are judged not only in terms of cost-effectiveness, scalability, and student completion rates and grades but also in

terms of student satisfaction and student acquisition of skills and knowledge, as indicated by a variety of measures, both qualitative and quantitative.

### ***Canada Research Chairs (CRC)***

The identification of these specific themes in mission critical and disciplinary research has given AU an opportunity to access CRC funding and strategically select leaders who are outstanding in their field. CRC's have been appointed in Distance Education and in Space Science. A Third CRC in the Project Management of Distance Education has been nominated.

AU has identified the following priority research areas for CRC positions:

<b><i>Tier</i></b>	<b><i>Priority Research Area</i></b>	<b><i>Granting Pool</i></b>
II	Research in Distance & Online Learning	Appointed Jan. 2001
II	Space Science	Appointed October 2002
II	Project Management in Distance Education	Nominated December 2002

Every two years the University will establish a committee of peers to review and assess each Chair's progress in fulfilling the research objectives established at the time of hiring.

### **3. Research Culture and Support: The Role of the Research Centre**

Underlying the entire URP is the need for AU to develop and support a more active research culture in order to achieve its short- and long- term research goals. Before identifying the specific actions and measure for the research related areas of the SUP, the following activities will be undertaken by the Research Centre to support the development of the AU research culture by increasing research funding and publishing.

**a) Funding**

- Devise templates and style sheets for proposal writing.
- Maximize the number of proposals submitted to competitions.
- Plan specific campaigns to identified funding agencies.
- Participate in relevant meetings, workshops and conferences both in Canada and internationally.
- Work with other small universities and with political representatives to increase federal and provincial funding for small universities in remote regions.
- Working with the researcher, scrutinize and edit each application for maximum impact.
- Network with funding agencies, government departments, companies, and other potential sources of research monies.
- Circulate funding information to academics in a timely manner.
- Actively identify academics who would fit funding opportunities and solicit proposals.
- Monitor and actively aid proposal writers and ensure that deadlines are respected.
- Actively seek out large funding projects, especially those that can be used to attract funding from multiple sources.
- Establish better engagement procedures to expeditiously recruit and hire researchers in temporary positions.
- Encourage academic centres to develop and publish an annual Centre research agenda.
- Encourage academics to align research foci with funding opportunities.

**b) Successful research and publishing**

- Aid academics in identifying appropriate journals for publication.

- Support the development and enhanced reputation of the AU distance learning journal: IRRODL.
- Hold regular discussions with academics on research issues including an annual research retreat.
- Encourage emerging unpublished scholars through internal funding.
- Support internal and external research publishing partnerships and teams.
- Publicly recognize and reward the achievements of published researchers.
- Emphasize the value of recent publications for hiring of academics, merit increases and promotion.
- Encourage adjunct academics to publish under the AU banner.
- Encourage graduate students to publish research, either with fellow students, academics or independently.
- Encourage academics to align research foci with their own strengths and the strengths of their centres.

#### **4. Research Ethics Board**

The Research Ethics Board shall continue to evaluate research proposals to ensure that they comply with the “*Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*” (TCPS). For all proposals that pose only a minimal risk to participants, the University will implement an expedited review process that conforms to the TCPS.

#### **5. SUP Related Research Goals**

The 2002-2006 Strategic University Plan research goals will be addressed as outlined in *Appendix A: SUP Related Research Measures and Targets* and *Appendix B Research Targets 2001/2005*.

#### **6. Planning and Approval Process for the University Research Plan**

This plan, drafted by the Associate Vice President Research is based on consultations with individual academics members and on a one-day academic research retreat held in May 2002, and on comparisons with the plans of several

other universities. This draft will be submitted to the different academic centres and will be submitted for approval to the Academic Research Committee and the Academic Council, before being sent to the Governing Council for official approval according to this schedule:

September 4, 2002	Version 1 submission to ARC members
September 18	Discussion at the ARC: Feedback
September 25	Version 2 to GSB, Council of Centre Chairs & staff
October 4	AVPR meeting in Calgary with staff
October 8	AVPR meeting in ELC with staff
October 9	AVPR Feedback meeting at AU central
October 11	Version 3 to ARC
October 16	Version 3 discussion at ARC
October 21	Version 4 to GSB, CCC, agenda committee AUAC
November 6	Version 4 discussion at Academic Council
November 25	Version 5 to AUAC
December 11, 2002	Approval of URP at AUAC

**Appendix A**

***SUP Related Research Measures and Targets***

<i>SUP Area/Goal</i>	<i>Strategy</i>	<i>Actions</i>	<i>Targets</i>
<b>MEETING LEARNERS' NEEDS –A) Openness</b>			
Ensure that the quality of learning, teaching, and support services are informed by current research both in the disciplines and in distance and open learning	Develop with the Academic Research Committee, an annual, three-year, rolling comprehensive research plan (for approval by AU Academic Council).  <b>Commentary</b> This URP will exist as a work in progress serving as a guide that will be adjusted according to the evolving needs of the University, and in response to national, provincial and institutional priorities.	The AVPR, in consultation with ARC, will present a 3-year, rolling update to this URP. This review will include an appraisal of the salience of each theme as demonstrated by the participating researchers.	Annual approval by AUAC
	Develop mechanisms to support internal research forums on disciplinary and interdisciplinary topics		
	Improve the opportunities for academic staff, and for professionals with research responsibilities, to contribute to their fields and in open and distance learning  <b>Commentary:</b> As shown in section 4 of the URP, the Research Centre will work to establish an active research culture in the University through its support of the Academic Research Fund, the Academic Professional Development Fund, the Tutor Professional Development Fund and the Graduate Student Research Fund.	The Research Centre will work to build a vibrant and productive research culture through initiatives listed in section 4 of the URP.	Goals for internal funding: Increase number of ARC funded researchers each year by at least 5. Increase % of conference presentations that lead to publication by 20%. Increase number of Tutor PDF funded researchers by 20%. Increase number of GSRF funded researchers by 50%.

	<p>Provide training opportunities, including best-practices discussions, across the University.</p> <p><b>Commentary:</b>  The Research Centre will provide research-training opportunities to academics and professionals. Information on opportunities for research training available from other sources will be circulated on a regular basis through an improved web presence and an archived mail list related to research opportunities. The basic tools of research will be made available to academics through discounted purchases or licenses of software that can be used by a variety of researchers from different disciplines including qualitative and quantitative data analysis software, bibliographic and citation management software, etc.</p>	<p>Establish benchmarks to match or exceed present training opportunities</p>	<p>In 2003/04:  Host at least 12 Lunch 'n' Learn sessions/year  Organize 2 workshops/year on relevant research topics  Attain at least 2 research software applications to assist academics conducting qualitative and/or quantitative research.</p>
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<i>SUP Area/Goal</i>	<i>Strategy</i>	<i>Actions</i>	<i>Targets</i>
<i>MEETING LEARNERS' NEEDS – C) Quality Courses, Programs, and Student Support Services</i>			
Increase number of graduate programs offered	Objective 2: With direction from the annual three-year Educational Plan, the University will have its first doctoral program approved by 2005.	The Research Centre will actively support the creation of a doctoral program for the University.	Establish an active research agenda among academics and doctoral candidates by 2005.

<i>SUP Area/Goal</i>	<i>Strategy</i>	<i>Actions</i>	<i>Targets</i>
<i>PROVINCIAL, NATIONAL, AND INTERNATIONAL POSITIONING</i>			
1: To improve AU's accomplishments, visibility, and recognition as a key provider of education in Alberta.	Objective 2: Improve AU's profile among provincial educational institutions by <ul style="list-style-type: none"> <li>- Increasing our research profile with publications, contracts, grants, and awards that are in line with other provincial institutions.</li> </ul> <p><b>Commentary:</b> The Research Centre will work with academic and professional staff to increase the number and quality of publications, contracts, grants, and awards.</p>	The Research Centre will work to build a vibrant and productive research culture through initiatives listed in section 4 of the URP	Increase by 2005: Refereed publications by academics & professionals Book chapters published by academics & professionals; Books published by academics & professionals; Non-refereed publications by academics & professionals.  The value of provincial grants and awards will rise from \$24,163 to more than \$100,000.

	<ul style="list-style-type: none"> <li>- Providing provincial leadership in research and practice in open and distance learning.</li> </ul> <p><b>Commentary:</b> The Research Centre will work with academic and professional staff to increase the number and quality of publications, contracts, grants, and awards in the field of open and distance learning.</p>	As above	<p>By 2005, the number of publications in open and distance education will increase by more than 25%, including:</p> <ul style="list-style-type: none"> <li>Refereed publications</li> <li>Book chapters</li> <li>Books</li> </ul> <p>The value of provincial grants and awards for research in open and distance education will increase from \$67 656 to more than \$100 000.</p>
2. Enhance AU's reputation as <i>Canada's Open University</i> ™.	<p>Objective 2: Strengthen our collaborative, national educational and research partnerships by</p> <ul style="list-style-type: none"> <li>- Exploring opportunities to engage in national research agendas.</li> </ul>	The Research Centre will actively support faculty participation in programs that support national research agendas. The University will participate in research partnerships with Industry Canada, CANARIE and other Canadian and international universities and other learning institutions.	AU will participate in at least eight such programs between 2002 and 2005.
	<p>Objective 4: Increase our national reputation for research into open and distance education by</p>		Complete a study by June 2003 to determine how academic citations apply to AU, and what targets are appropriate.
	<ul style="list-style-type: none"> <li>- Improving the citation ratings of AU's staff.</li> </ul>	The Research Centre will conduct a study of citation ratings procedures and make recommendations to faculty on ways of improving staff citation ratings.	

	<ul style="list-style-type: none"> <li>- Increasing the profile and circulation of IRRODL.</li> </ul>	<p>IRRODL will become established as one of the top three scholarly journals in the field of open and distance learning research.</p>	<p>By March 2003, the Research Centre, with the support of Public Affairs, and the Editorial Board will develop a strategy for the promotion of the journal.</p>
	<ul style="list-style-type: none"> <li>- Increasing the value of grants received for research in open and distance education.</li> </ul> <p><b>Commentary:</b> The Research office will, on an ongoing basis, monitor research-funding programs as they become available, alerting academics and professionals to opportunities as they arise.</p>	<p>The Research Centre will work to build a vibrant and productive research culture in open and distance education through initiatives listed in Section 4 of the URP.</p>	<p>Grants received from external sources for open and distance learning over the life of this plan will exceed \$1 million.</p> <p>Number of externally funded researchers in distance education will increase.</p>
	<ul style="list-style-type: none"> <li>- Increasing the presentations in open and distance education made by staff at national conferences.</li> </ul> <p><b>Commentary:</b> The Research Centre will, on an ongoing basis, monitor open and distance learning conference announcements, alerting academics and professionals to deadlines for papers.</p>	<p>The Research Centre will work to build a vibrant and productive research culture in open and distance education through initiatives listed in Section 4 of the URP.</p>	<p>Increase number of research papers presented and specifically, the number of research papers on distance education.</p>
	<ul style="list-style-type: none"> <li>- Hosting national conferences or events around distance and open education.</li> </ul>	<p>As above</p>	<p>By 2005, the Research Centre will support the hosting of two national (international) conferences and 3 other events on distance and open education.</p>
	<ul style="list-style-type: none"> <li>- Conducting, in collaboration with key industry leaders, field research and practice in the application of emerging technologies for distance and open learning.</li> </ul>	<p>The Research Centre will support research collaboration with emerging technologies leaders.</p>	<p>By 2005, at least four collaborative research projects will be established.</p>

<p>3: To become recognized as the premier open and distance learning university in North America.</p>			<p>By 2005, AU will have more citations, conference presentations, refereed research papers, book chapters, books, and other articles published on distance education related research topics than any other university in North America.</p>
<p>4: To further AU's international reputation as a leading, open, and distance university.</p>	<p>Objective 2: AU will develop its international institutional profile as a leader in distance and open education by:</p>	<p>As required, the Research Centre will work with international project coordinators to ensure that each project that the University works on has an active research and evaluation component.</p>	<p>Increase annual participation in international conferences</p>
	<ul style="list-style-type: none"> <li>- Facilitating and increasing international research in open and distance learning.</li> </ul>	<p>The Research Centre will support staff wishing to participate in international conferences for open and distance learning and encourage individual research partnerships with international institutions.</p>	
	<ul style="list-style-type: none"> <li>- Engaging in select international development, consulting, and training projects.</li> </ul> <p><b>Commentary:</b> The Research Centre, in collaboration with Institutional Studies, will ensure that all international projects include a research component.</p>	<p>The Research Centre will work to build a vibrant and productive research culture in open and distance education through initiatives listed in Section 4 above.</p>	<p>Increase annual participation in international conferences for open and distance education</p>

<i>SUP Area/Goal</i>	<i>Strategy</i>	<i>Actions</i>	<i>Targets</i>
<i>ORGANIZATION AND PEOPLE</i>			
Promote a productive workplace environment	Improve employee wellness vi. Enhancing employee recognition ix increase tutor participation		
	Prepare for staffing continuity and effectiveness 1) Developing a comprehensive workforce plan for the recruitment and retention of staff		

<i>SUP Area/Goal</i>	<i>Strategy</i>	<i>Actions</i>	<i>Targets</i>
<i>FISCAL HEALTH</i>			
2: To expand the sources of University funding.	Develop a strong research arm that will attract project funding, benefiting the organization as a whole.	<p>The Research Centre will actively seek out research and project funding from a broad range of sources. It will actively monitor external research and project funding programs as they become available, alerting academics and professionals to opportunities as they arise.</p> <p>All proposals and projects will be supported on request. The Research Centre will also provide report generation, book keeping, invoicing and billing support to academics with approved research projects.</p>	<p>By 2005, the Research Centre will have processes and systems to support increased numbers of applications for external funding and externally funded researchers. External funding for research will exceed \$1 million.</p> <p>An average of one research alert will be posted per week.</p>

## Appendix B

<b><i>RESEARCH TARGETS 2001/2005</i></b>	<b><i>2001/2002 Baseline</i></b>	<b><i>2002/2003</i></b>	<b><i>2003/2004</i></b>	<b><i>2004/2005</i></b>
Refereed publications by academics and professionals	69	79	89	100
Book chapters by academics and professionals	22	24	27	30
Books by academics and professionals	12	14	16	18
Non-refereed publications by academics and professionals	79	90	105	120
Refereed publications by academics & professionals in open & distance education	32	38	44	50
Book chapters by academics and professionals in open and distance education	5	7	9	12
Books published by academics and professionals in open and distance education	1	1	2	3
Externally funded researchers in distance education	9	10	11	12
Presentations of research papers	193	212	231	250
Presentations of research papers about distance education	79	86	93	100
Participants at international conferences	91	100	110	120
Participants at international conferences for open and distance education	44	49	54	60
Applications for external funding	52	61	70	80
Researchers with sources of external funding	20	23	26	30