

## Questions from SNR for the review team

In your opinion, do you think that SNR challenges and priorities will be effectively addressed by:

- 1) working with an administrative consulting firm to build a better community and provide training opportunities for SNR team members with administrative appointments?
- 2) reevaluating management of undergraduate teaching within SNR, including coordination of online teaching, common core, capstone, and/or integration of majors?
- 3) completing a formal review of opportunities and challenges for graduate student expansion in SNR?
- 4) increasing efforts to evaluate and potentially expand the role of SNR Extension within IANR Extension Program?
- 5) encourage faculty leaders to modify their portfolios to facilitate larger teams through evaluation of the research program by the Director and the Dean of Research and developing appropriate incentives?
- 6) reviewing or establishing sustainability plans for all SNR Centers?
- 7) rebuilding Geography program and increase cross-college efforts to establish framework for leveraging faculty positions and role of geography in CAS?
- 8) developing a plan for establishment of External Advisory Boards for SNR and potentially within SNR Mission areas?
- 9) establishing an external fundraising and development committee to enhance SNR endowment?

## Questions from CAS administration, and responses from SNR

1. What is the relationship between the new SNR Applied Climate Science major and the Meteorology-Climatology major in the Department of Earth and Atmospheric Sciences in the College of Arts and Sciences? Who are the target students for these different majors? Many of the courses required for the ACS major are taught by EAS faculty. As the ACS major grows how does SNR plan to coordinate course offerings with EAS?

This major is distinct from the EAS meteorology-climatology program in that we are training students on the application of climate science and climate information to improving our management of natural resources.

The meteorology-climatology program in EAS is focused more on training students in areas associated with understanding the atmospheric system and weather forecasting. Our goal has always been to provide students interested in meteorology and climatology with an alternative track or option for understanding the earth's climate system and the application of that knowledge to solving real world problems.

Students in the ACS major need to first develop and fundamental knowledge of the climate system by taking several courses through EAS. However, our students then focus more on development an improved understanding of the application of this information by taking courses in other areas such as biology, soils, water, ecology, GIS to make the connection to how this information can be used to improve decision making in these other areas. Given the emerging and rapidly developing field of climate change adaptation and mitigation, ACS students can make important contributions to understanding the role of applied climate science in managing natural resources in a changing climate.

Students in the EAS major will also benefit from taking courses in our Applied Climate Science curriculum. The National Weather Service, a major employment destination for many of the EAS majors, for example, has a "climate focal point" position in each office and several of their staff have tasks related to applied climate science. Many of the recent employment opportunities advertised for Meteorology majors also mention climatology as a related expertise that they are looking for. The two disciplines of Meteorology and Climatology although distinctly different also have considerable overlap. The Applied Climate Science major therefore would benefit from taking courses in Meteorology and the Meteorology majors in EAS would also benefit in having some course work in the field of Applied Climate Science.

Several of the faculty in EAS and Applied Climate Science have joint appointments in each program and several faculty from each group are working together on common research projects. It should also be noted that several graduates of the EAS Meteorology program are employed in our Applied Climate Science centers.

With this in mind, we created an atmospheric sciences Internet web portal ( to help the incoming UNL students learn about both programs and their inter-relationships. We hope that this approach will attract students to the University of Nebraska when they see the depth and breadth of our two programs. The faculty of both programs meet on a regular basis to coordinate the course offerings and to create a schedule of course offerings to ensure that students in both majors can graduate in a timely manner.

2. SNR is committed to growing the Geography/GIS program, which is shared with Arts and Sciences. How does SNR plan to develop the Geography program so that the interests of both SNR and Arts and Sciences (students and faculty) are best served?

Faculty members for the GSS program will be hired through both IANR and CAS. Faculty lines hired through IANR will have duties that are primarily geared toward teaching CASNR courses, and conducting research that supports both SNR and IANR. It is expected that most GSS faculty hired through IANR would be in the fields of GIS and Remote Sensing and have a portion of their appointment in CALMIT. These faculty are expected to compliment and develop strong interactions with faculty in CAS.

GSS faculty lines from the College of Arts and Sciences will be hired with input from the CAS Dean's office. These positions will be primarily geared toward teaching courses that are offered through CAS and to develop strong interactions and research programs with faculty and students from departments throughout CAS. Faculty lines will be hired to teach both large enrollment and ACE courses that serve students from a wide range of majors and multiple colleges at UNL. As is presently the case, the majority of both our Geography majors and the CAS courses we expect to teach will be on City Campus in the future.

It is expected that GSS hires through CAS will have backgrounds that are primarily in the field of human geography with an emphasis in human-environmental interactions. We anticipate hiring faculty that have strong geospatial skills to compliment the faculty in the unit. This focus on human environment interactions will be important for developing strong interactions with faculty and students from other CAS programs, particularly those in the social and physical sciences. We fully expect that these areas of current research, as well as the capability to support a broader range of spatial technology capabilities (e.g., GIS, GPS, geovisualization, and spatial modeling) will well position Geography faculty and the CAS to be competitive for research funding that addresses critical environmental and societal issues that will be of interest to funding agencies in the future. To facilitate both teaching needs and productive research programs for these faculty, we fully expect that the GSS program will retain advising, classroom, and office space on City Campus.

Many A&S subjects, including History and English, are experiencing a "spatial turn". Geography has become an exporter of theory, not just techniques. There is also a great interest in what geographers have to say about place and the diverse rhythms of life in places. Again, scholarship in History and English, for example, draws heavily from geographic theory to elucidate this theme. Geography is more relevant than ever before—that's why it is growing nationally. A graduate Seminar in Historical Geography, offered this semester, has 3 students from English, 2 from History, 1 from Art, and 1 from Geography. We will continue to seek out and expand these interdisciplinary connections.