



**Career & Technical Education Coordinating Committee (CTECC)
PROGRAM ADVISORY COMMITTEE SELF EVALUATION
2010-2011**

Program Advisory Committee Name: Geographic Information Systems (GIS)

Advisory Committee Members

Community Advisory Committee Chair: **Ben Greiger with Willamalane Parks**

Lane Advisory Committee Coordinator: Jane Benjamin

Program Division/Dept Dean: Ken Murdoff

Committee Review Date and Time: October 20, 2010 at 7:15 am

Instructions: Please fill in your response to each question in the yellow section (short bullet points are best). The yellow sections will expand to accommodate the data you type in. When the form is completed please forward by e-mail, at least one week prior to the committee interview, to Phoebe Anderson in Cooperative Education at andersonp@lanecc.edu. Thank you. We look forward to meeting with you and your committee.

Rating Scale: (To be completed by the CTECC)

E=Excellent ME=Meets Expectations NI=Needs Improvement

NA=Not Applicable +=Performance deemed exemplary by Committee

E

1. Committee Accomplishments

1 A. 1) *Describe your advisory committee and what types of businesses or organizations are represented in your committee.*

Our committee is made up of GIS specialist working in private businesses that manage resources and government agencies at all levels. They include OBEC Consulting Engineers, 3diWest, Metro Planning Inc., Eugene Police, Willamalane Parks, Forest Service, Eugene Water and Electric Board, Department of Agriculture, City of Eugene, Springfield Public Works, Lane County and Lane Council of Governments.

2) *How many are in your committee?* 12 members

3) *How often do you meet?* 3 times per year

1 B. *What are 3-5 outcomes that have been accomplished by your committee?*

- Align GIS educational criteria with agency needs to assure employable outcomes and viable career options.
- Share talent and equipment between agencies for effective use of resources.
- Establish the technical capability to make Lane the regional leader for GIS education and training

1 C. *How did your advisory committee help with achieving those goals?*

- Approved and contributed to curriculum decisions
- Provided part-time instructors to teach specific and advanced GIS classes
- Addressed GIS classes to talk about career opportunities and workforce needs.
- Supported specialized professional GIS training held on Lane's campus.
- Hosted dedicated student workstations.
- Attended annual "Student Showcase" to critique student work.

1 D. *Describe your committee efforts in developing and generating community support.*

- Attended GIS Day events to build awareness of GIS

- Visited classrooms to talk about professional GIS careers.
- Spread word among GIS professionals about Lane's program
- Discussed "branding" and sharing of logos

1 E. *What do you think are the committee members' strengths and weaknesses?*

Strengths:

- Expert at defining needed skill sets and trainings
- Commitment to the value of GIS at Lane Community College
- Mentoring and building relationships with students
- Stable presence

Weaknesses:

- Agencies and businesses are having budget problems and can't commit to paid internships.

E 2. Committee Involvement in Planning and Design

2 A. *What is the committee's involvement for keeping your program "state of the industry?"*

- Gives feedback at every meeting about curriculum needs.
- Leads discussions of new technologies.
- Discusses funding sources

2 B. *What staff development does the committee suggest your staff needs to meet future program skill needs?*

The committee would like to see a dedicated position in GIS to increase program stability, however we do understand the budget concerns.

2 C. *What is your committee's involvement in planning and design of the program?*

Regular participatory meetings inform:

- Curriculum change proposals
- Courses addition proposals
- Training proposals

ME 3. Gender, Disability Adaptation, and Diversity

3 A. *What is the gender balance and diversity in your program student population?*

Data from 07-09 classes show 41 males and 33 females completed the GIS course sequence. We have not calculated most recent data from 09-10. It's on the to-do list.

3 B. *How has your committee encouraged gender balance and diversity in your student population? What future plans do you have?*

- Recruiting at various careers fairs 4-5 times a year to reach women and minority students.
- Photo advertising uses images of women and non-traditional students.

We will continue our practices and discuss new ideas.

3 C. *How does your committee assist students with special needs to successfully reach program outcomes?*

The committee has not addressed this issue but the college does its best in to accommodate any person's disability. We have a wheelchair ready computer station in the classroom and are open to disability services to help us provide students with appropriate accommodations.

E 4. Program Demand / Enrollment

4 A. *1) What does your committee think of regional projections and how are you dealing with this? 2) What does your committee say about these and local needs? 3) What is the committee doing to get the word out to the broader community*

1) Regional demand for GIS education is high and the committee is aware of the trend. We are adding more sections and adding additional trainings that are taught by local GIS professionals.

2) *What does your committee say about these and local needs?*

- Supportive of the college's efforts to meet the needs of the community.

- In agreement to prepare more class offerings in Advanced GIS to satisfy student demand.
- 3) *What is the committee doing to get the word out to the broader community*
 - Post class offerings in offices/business
 - Talk to other professional about Lane's program
 - Teach classes and professional trainings.

4 B. *Describe the enrollment trends and capacity in your program?*

	Registration	Credits	FTE
07-08	62	244	7.3
08-09	94	376	10.7
09-10	199	638	17.7

Capacity for each section is 24 due to computer station constraints. Instructor time with that many students also call for limited class size.

ME

5. Placement / Employment

5 A. *How would your committee rate the exit math, writing, and interpersonal skills of students who complete your program?*

This has been a matter of discussion throughout the existence of GIS. Since we are not a full "program" but a certificate program we do not have full curriculum requirements for writing and interpersonal skills. We have math requirements for the GIS sequence enrollment. We find higher math skills equate into more successful students.

5 B. *How does your committee know that the students are graduating with the appropriate skills and level needed by the employers?*

- Committee members critique student work at the annual Student Showcase event.
- Committee members regularly provide internships and employ our students.
- Ongoing conversation between GIS instructors and committee members
- Certificate outcomes require that each student show competency in all outcome categories during the year-long sequence of classes.

GIS Pathways Certificate Outcomes:

- Identify and use geo-referencing systems and cartographic elements.
- Correlate features on topographic maps and aerial photographs.
- Acquire and generate relevant data with accuracy.
- Understand tables and address matching.
- Understand the steps for building a data model.
- Use GIS tools to describe, analyze, manipulate and visualize data.
- Construct effective queries to manipulate data.
- Design, develop, and present a GIS project to answer a specific need.
- Evaluate the accuracy, readability and cartographic integrity of a project.

5 C. *How does your committee follow-up with your graduates or transfers?*

Annual surveys are sent to compile data on employment levels, GIS skill usage, further GIS education etc. This has traditionally been done by the GIS Team and not the committee.

5 D. *1) What are the outcomes (placement rate, transfer, etc.) of those students who participate in your program? 2) How is your advisory committee involved?*

- 1) Our survey response is low making our sample difficult to measure with valid results. We have positive anecdotal reports from students.
- 2) The committee employs and provides internships for many of our students.

5 E. *1) What is the outlook for jobs in this career field? 2) What is the typical wage range and demand for jobs?*

1) Statewide Employment Analysis of 2008 for employment of for Cartographers and Photogrammetrists (nearest category offered by the state) is estimated to be somewhat smaller than the regional average. This occupation is expected to grow at about the

regional average rate. Total job openings are projected to be at about the regional average. There is high demand locally for entry level GIS positions for low pay.

2) *What is the typical wage range and demand for jobs?*

GIS Certificate	Hourly wage	Annual Salary
Lane County	\$10-12	Part-time
Bachelor's degree	Hourly wage	Annual Salary
Lane County	\$22.49/hr	\$48,155
Oregon	\$23.33	\$50,602

Lane County projects a 19% increase over the next 10 years. Annual job openings are projected to be 2 openings per year. In Oregon projection of 14 annual openings.

Referred to data for Cartographers/Photogrammetrists <http://www.qualityinfo.org>)

E

6. Secondary / Postsecondary Connections

6 A. 1) *How does your program connect with high schools?* 2) *Is your committee involved?*

1) Lane's GIS program leaders have secured a 3 year National Science Foundation Grant to connect GIS to local high schools by training high school teachers to develop curriculum for high school students. This grant is in its last year.

2) The committee is aware of the grant work being done and is supportive of the program but they have not been directly involved. The Advisory Committee recognizes the need for GIS literacy in this fast growing field.

6 B. *How do you align, articulate, and develop a program of study that links between high school, community college, and 4 year institutions?*

Completed Articulation Agreements for GIS classes:

- University of Oregon
- Oregon State University
- Oregon Institute of Technology
- Southern Oregon State University
- Portland State University
- Central Oregon Community College

High schools articulations are in development

7. Questions for the CTECC Interview Committee

7 A. 1) *What questions do you have for us?* 2) *How can we support you?*

This questionnaire gives us ideas about many of our activities but no particular questions at this time. Thank you!