

Geomatics Advisory Board
Engineering & Industry Building
Room: EIB 413
Date: Friday, October 9, 2015
Time: 8:00AM – 10:00AM
Minutes: Sandra Medina, GEO Admin

1. Call to Order- 8:10am

2. Welcome and Introductions

3. Roll Call

Attended:

Tom Newman
Nathan Wardwell
Michael Schoder
Paul Brooks
Steve Buchanan
Jeff Yates
John Koltun
Owen Dicks (GSA)
Caixia Wang (UAA)
John Bean (UAA)
Jeff Hollingsworth (UAA)
Gennady Gienko (UAA)
On the phone:
Eric Gabrielson
Joel Nudelman

Excused Absences:

Terri Morganson
Kevin Quinn
Jim Sharp
Steve Schmitt

4. Approval of and changes to Agenda

Adding brief discussion with Dean Fred Barlow around 8:45am

John Koltun motioned to approve with changes. Paul Brooks 2nd. Approved.

5. Approval of minutes from May 1, 2015 meeting.

Michael motioned to approved minutes, Paul Brooks second. Approved.

*thank you note from Bart Quimby was distributed. Please see *Attachment 1*

6. Election of Chair and Vice-Chair

- a) New Chair: As discussed and voted on from previous meeting, Nathan Wardwell is the new chair.
- b) Vice-Chair: Michael Schoder was voted in.
- c) Tom Newman stepping down.

7. Meeting handed to new Chair, Nathan Wardwell.

8. Discussion of potential new members to replace vacancies.

John Oswald has retired. Luke Bogges has stepped down, too.

Possible new candidate for GAB: Dave Hale or Len Story- R &M (Anchorage), Nicole Kinsman-NOAA/NGS, Isaiah Ditmer or Jason Madsen- Kodiak Mapping, Stan Moll (DAT/EM) and Jennifer Dowling.

Nathan and Michael will make contact with potential candidates.

9. GAB sub-committee update: Capstone Projects

The sub-committee stalled over the summer. A letter was drafted but no follow up was taken. Steve will speak with Terri and getting the committee going again. For now, send any ideas you may have to John Bean. Currently, John bean has a student interested in a project with stainless steel rods. If GAB has any ideas on how to help the student, please contact John Bean. A share-point server idea on the university site was discussed with Gennady, but on further investigation, this possibility would not be feasible because UA credentials are required for everyone to access pages on the share point portal.

A discussion on funds was brought up by Don Davis. Per Gennady, we have no clear amount of how much money we have in the Talcott Funds. Over the summer we purchased two pieces of equipment averaging \$30k. Gennady will continue to work with the Colleges fiscal department to get exact numbers.

Two GEO students were recruited by CE students to assist with their projects. They did a topo survey. It looks like the two GEO students will also make that activity their Capstone project.

10. Geomatics Student Association & Scholarship recipients:

- a) Owen Dicks gave update: As of 10/9/2015, GSA has 33 active members: 24 Surveying, 5 GIS, 2 GEO-Developers, 1 Anthropology and 1 Undeclared. GSA has actively been involved in the Campus Kick-off and the EIB Ribbon cutting ceremony with their Sandbox display. Held their first meeting on 9/17/2015 (five members spoke: Dan A, Leah B, Gerhardt H, Sean P, Ryane S.) there were 32 people in attendance. This past Wednesday, 10/7/2015, held the first outreach in conjunction with Ken Ayers of Lansburry at Wendler Middle school, all too positive reviews and feedback.
- b) Lilly has participated in several National conferences. Is really good at networking, GAB is really impressed with her. She made a big impact at the ASPRS conference. ASPRS Alaska provided scholarship for her to attend the most recent ASPRS conference.
- c) Alaska ASPRS region and GSA will have a joint meeting. More information will come once details have been worked out.
- d) Hydrographic surveying society offers scholarships for travel to conference.
- e) ASPLS gives back to the University and offers scholarships. It's up to the GSA to ask the GAB and to let them know what they want. GAB is here to assist and help with support.

11. Q &A with Dean Fred Barlow: 8:50am

Message from the Dean: He is fairly new to the College (University), started in July 2015. He is aware that GEO is short staffed with faculty and is working on fixing that.

Q: What kind of budget does Geomatics have?

A: Budget is centralized. There is 7 million for the whole college. Unsure of exact amount for GEO. State funding will decrease another 5% this coming FY. This fall has had the largest revenue from tuition.

Q: How are funds allocated?

A: Will need to look into it. The fall 2015 budget was already set prior to my hire, little to no input on the fall budget

Comment from Michael: GEO is a jewel. GAB supports Geomatics and its students. The program is essential to the growth of the industry.

Dean Barlow: Glad to see that the Geomatics Advisory Board is engaged and involved with GEO. Looking into expanding the program, possible online courses. Working with Gennady on possibilities. There has been talks amongst the Provost, Chancellor and the Deans about budget cuts. They are coming, mostly to administration. They won't be across the board. I will argue to not cut GEO program. The GAB is welcome to work with me on a proposal to make that happen.

Comment: As a department advisory board, we are not represented on the College Advisory Board. We would like representation on the CoENG AB.

Dean Barlow: I will look into the bylaws to see what can be done.

Nathan reiterated how great GAB and GEO work together and how active GAB is. Their vast representation from across the State.

12. 9:15- A 15 minute brake was taken

13. Geomatics Department Updates:

Please see *Attachment 2*. General comments were: GEO has 4 regular faculty, all strong and committed to the program. Overloaded compared to other departments within the college. GAB suggested to show graphs and data with the Dean. Lots of students don't graduate because they head into industry jobs with one or two semesters to go.

14. ABET accreditation Fall 2016- Jeff Hollingsworth

There is lots of information to put out. Confident we will do well. If you go to ABET.org you can see the criteria we will be graded on.

~10:05- Michael existed meeting. Last comment was in support of showing the Dean the graphs and data presented.

15. Prioritization outcomes and future plans:

Please see *Attachment 3*.

~10:20 Steve left meeting

~10:40 Tom left meeting

16. Schedule next meeting

Next GAB meeting to coincide with the Survey Conference in February 2016

17. Adjournment- 11:05

Nathan motioned to end meeting, John 2nd. Meeting adjourned.



9 AUG 2015

DEAR GAB,

THANK YOU VERY MUCH FOR THE KIND LETTER & GIFTS ON THE OCCASION OF MY RETIREMENT. IT IS GREAT TO KNOW THAT MY EFFORTS ARE APPRECIATED, HOWEVER MOST OF THE CREDIT GOES TO THE WONDERFUL FACULTY & STUDENTS ALONG WITH YOUR OWN EFFORTS. IT WAS A HIGHLIGHT OF MY CAREER TO WORK WITH SUCH DEDICATED PEOPLE.

THE RIGGING KNIFE & BOOK OF KNOTS ALSO CAME IN USEFUL ON OUR RECENT 11 DAY CRUISE IN PRINCE WILLIAM SOUND.

BEST WISHES TO ALL AS YOU WORK TO SUPPORT THE GEOMATICS PROGRAM.

SNICERELY, BART QUIMBY

Department of Geomatics University of Alaska Anchorage

Update for GAB meeting

October 9, 2015

Faculty (2015-2016)

Name	Degree	Rank	Tenure	Years with UAA
John Bean	MSc	Assistant Prof	Tenure-track	3*
Gennady Gienko	PhD	Professor	Tenured	6
Jeff Hollingsworth	MSc	Assistant Prof	Tenure-track	3
Caixia Wang	PhD	Assistant Prof	Tenure-track	2
Frank Witmer	PhD	Assistant Professor	Joint appointment with CS&E, 1 class per year	1
Michael Hendricks	PhD	Adjunct Professor	1 class per year	
John Lang		Adjunct Professor	1 class per year	
Norm Harris	PhD	Associate Professor	Joint appointment with UAF, 1 class every two years	

Programs offered

- BS in Geomatics, ABET-accredited
- AAS in Geomatics
- Minor in GIS (Geographic Information Systems)
- Undergraduate certificate in GIS (**admission suspended**)

BS Geomatics: new curriculum (2014)

Geomatics core		Other Core Requirements		General Education Requirements				
GEO A146	Geomatics Computations I	3	BA A241	Business Law I	3	Communications	3	
GEO A156	Fundamentals of Surveying	3	BA A300	Organizational Theory and Behavior	3	Fine Arts	3	
GEO A246	Geomatics Computations II	3	ENGL A212	Technical Writing	3	Social Science	3	
GEO A265	Spatial Data Adjustments I	3	ENGR A161	Engineering Practices II	3	ENGL A111	Written Communications	3
GEO A267	Boundary law I	3	ESM A450	Economic Analysis and Operations	3	Humanities	3	
GEO A357	Photogrammetry	3	MATH A109	Precalculus	6			
GEO A359	Geodesy and Map Projections	3	MATH A272	Applied Calculus	3			
GEO A466	Geopositioning	3	PHIL A305	Professional Ethics	3			
GIS A101	Introduction to GIS	3	PHYS A123	Physics I with Lab	4			
GIS A201	Intermediate GIS	3	PHYS A124	Physics II with Lab	4			
GIS A351	Remote Sensing	3	STAT A253	Applied Statistics for the Sciences	4			
				Social Science Elective	3			
				Science Elective	3			
Total Geomatics Core		33	Total Other Core		45	Total GER		15

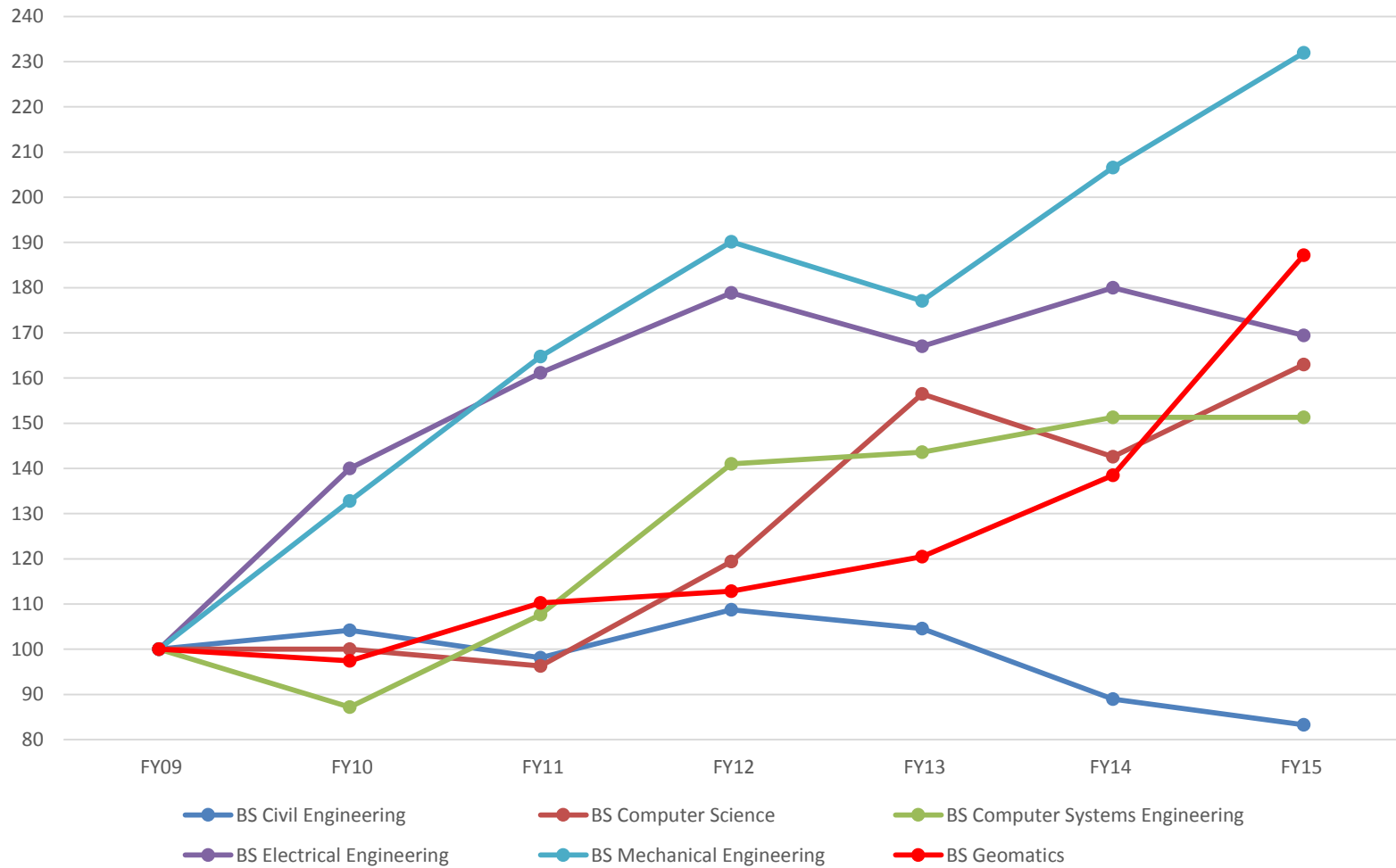
Surveying Concentration		Geospatial Science Concentration		Geo Developer Concentration				
GEO A157	Computer-Aided Drafting for Surveyors	3	GIS A301	Spatial Data Structures	3	CSCE A201	Computer Programming I	4
GEO A256	Engineering surveying	3	GEO A410	Airborne LiDAR Surveying	3	CSCE A202	Object-Oriented Programming	3
GEO A266	Advanced Surveying	3	GEO A420	High Density Spatial Data Analysis	3	CSCE A360	Database systems	3
GEO A366	Spatial Data Adjustments II	3	GIS A366	Spatial Analysis	3	GEO A420	High Density Spatial Data Analysis	3
GEO A369	Cadastral Surveys	3	GIS A367	Image Analysis	3	GIS A301	Spatial Data Structures	3
GEO A457	Boundary law II	3	GIS A458	Spatial Data Management	3	GIS A366	Spatial Analysis	3
PEP A110	Remote First Aid	1		Geomatics elective	3	GIS A367	Image Analysis	3
	Geomatics elective	3		Geomatics elective	3	GIS A458	Spatial Data Management	3
	Geomatics elective	3						
		25			24			25
GEO A460	Geomatics Capstone Project	3	GEO A460	Geomatics Capstone Project	3	GEO A460	Geomatics Capstone Project	3
Total Credits		121			120			121

CoENG Enrollments: Fall Head Counts (including pre-majors)*

Program	FY09	FY10	FY11	FY12	FY13	FY14	FY15
BS Civil Engineering	263	274	258	286	275	234	219
BS Computer Science	108	108	104	129	169	154	176
BS Computer Systems Engineering	39	34	42	55	56	59	59
BS Electrical Engineering	85	119	137	152	142	153	144
BS Mechanical Engineering	122	162	201	232	216	252	283
BS Geomatics	39	38	43	44	47	54	73

*<http://www.uaa.alaska.edu/collegeofengineering/accreditation.cfm>

CoENG Enrollments: Fall Head Counts (percent)



Enrollment and graduates (BS Geomatics)

- Student enrollment
- Fall 2013: **63**
- Fall 2014: **76**
- Fall 2015: **81**
- Students graduated
- 2013-2014: **4**
- 2014-2015: **16**

6-year graduation rate: baccalaureate degree (2013-2015)*

- *MEASURE: The percentage of first-time, full-time baccalaureate degree-seeking students in a given fall semester who earn a degree within six years*
- Natl. Average Baccalaureate: 56%
- University Peer Average: 36%
- UAA Baccalaureate: 28%
- UAA BS Geomatics: 82%**

* UAA institutional research

** Departmental statistics

Scholarship recipients (2015-2016)

- ASPLS scholarship
 - Daniel Collins
 - Colton Jessup
- Excellence in Geomatics and Geospatial Studies
 - Sean Pearson
- Sidney Henderson Jr. Scholarship
 - Sean Pearson
 - Lillian Capell
 - Madison Baker
 - Daniel Collins

Scholarship recipients (2015-2016)

- Hewitt V. Lounsbury Scholarship
 - Rachel Eytalis
 - Vincent Carlos J
- Maurice P. Oswald Scholarship
 - Erin Palmer
 - David Parret
 - Gina Rountree
 - Christopher William
- Society of American Military Engineers (SAME)
 - Gerhard Hahn

ABET visit

- Scheduled in Fall 2016
- Jeff Hollingsworth leads the departmental effort
- College-wide assessment committee & support

OUTLOOK FOR 2015-2020

Goal 1: Sustainable growth of enrollment

- Student-driven outreach
 - middle and high schools
- Advisory Board driven outreach
 - Nation-wide conferences and networking
- Faculty-driven outreach
 - Current students campus-wide
 - Military outreach
- Recent alumni-driven outreach

Goal 2: Sustainable growth of retention and graduation rate

- Mandatory advising
 - UAA-wide for all freshmen and sophomores
 - Department: for **all** Geomatics students
- Curriculum improvement
 - Realignment of math courses
 - Programming skills
 - Revision of course prerequisites
 - Adjusting course levels (upper division and graduate)
 - Strengthen concentrations
 - New core and elective courses

Goal 3: Graduate Cert in GIS

- New Graduate Certificate in GIS to replace Undergraduate Certificate in GIS

Goal 4: Building research capacity

- Balanced workload
 - Increase R&D component in workload for full-time faculty
 - Additional faculty position with research agenda
 - Adjunct faculty
- Closer research collaboration with industry
- Establishing a graduate (MSc) program

Goal 5 (long term): Masters in Geospatial Science

- New joint MSc program
 - Civil Engineering / Arctic Engineering
 - Geospatial Science concentration
- Industry-placement MSc in Geospatial Technologies
 - Several industry-leading Geospatial companies in Anchorage