ESS Strategic Plan

Committee: Cailey, Marine, Roger, Gerard

- Framed as 'Shared to-do list' for us as faculty.
 - Based on 10-yr report, ex. comm response,
 - January faculty retreat
- Not a mission/values statement, nor outward facing glossy brochure (potentially the basis to become one).
- Concrete list of actionable things we want to do (so we don't forget about them)

<u>Timeline of Strategic Plan:</u>

Jan 22 – Faculty retreat.

Mar 3 -- Charge letter from Chair for committee.

Mar 22 – First draft to committee.

Apr 11 – Committee met.

Apr 17 to Apr 28 – specific feedback sought: Juliet (MESSAGe, Curriculum), Eric (Development, Facilities); also Fang-Zhen (Graduate program, Development), Drew (Undergraduate program), Summer (Development, Communication, Community)

May 2 – May 12: Circulated for faculty feedback

May 16 – May 25: Circulated for whole ESS community feedback (total 11 responses - thank you!)

May 26: Committee met with Chair, revisions, review suggestions/feedback

Summer '23: stay open for feedback, meet Fall '23 to incorporate

- Synopsis of plans, basis for future discussions

Two nudges to governance:

- Executive committee composed of the chair, two associate chairs (3-year terms, approved by the full faculty), plus two additional faculty members (approved by the full faculty), with rapid rotation (one new rotation every quarter (two quarter terms)). College Council rep. ex officio.
- Develop a checklist of oversight-committee responsibilities (e.g., More than just budget. Talk to each committee chair, and office administrator. Report back to faculty annually).

ESS Curric Comm Report to Faculty

2 June 2023

Juliet Crider

Undergraduate curriculum update

Progress report, ongoing discussions

Focus on ESS BS degree

Current misalignment of degree requirements with actual capacity.

Many ad hoc patches: not serving students, not sustainable.

This year: identifying desired outcomes and restructuring that brings our offerings into alignment with our current faculty.

Outcomes for our undergraduate degree program(s):

Disciplinary knowledge
 Address content and degree of flexibility in the degree tracks

1. Transferable skills

writing & communication skills quantitative & computational skills field and laboratory skills scientific and professional ethics other professional preparation

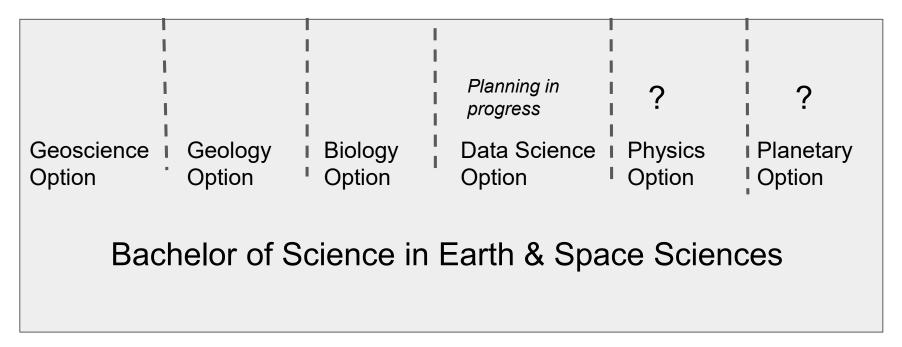
1. Sense of community, belonging, purpose & achievement

common foundation

culminating coursework

enrichment activities: GeoClub, Gala, Rock'nOut, trips, research experiences

Proposed framework: single BS degree with options*



^{*}We currently have for *different* degrees. Students could declare their major earlier, without having to declare the track right away.

Defining a single streamlined BS degree with options

Constraints from the university (faculty council on academic standards):

- Maximum 90 credits
- 45 credits in a shared core, remainder may differ
- 45 + credits at 3xx or above

Proposed common core for ESS BS degrees (45 cr)

Supporting science (20 cr)

- Physics 121 (Mechanics for science & engineering majors) (5 cr)
 or Phys 114+117
- Math 124, 125 (differential and integral calculus) (10 cr)
- Chemistry 142 (General chemistry for science and engineering majors) (5 cr)

Core ESS courses (25 cr)*

- All of: ESS 211, 212, 213 (Could we reduce this?)
- Two of: ESS 311, 312, 313, 314, 316

Courses in the ESS core must be taught annually and have at least two faculty on standby to teach.

Proposed framework for the options (45 additional cr)

The ESS common core, plus

- 10 cr. additional 1xx or 2xx supporting science/math/CS courses
- 10-15 cr. additional, **discipline-specific 3xx courses** (2-4 courses)
- 8-15 cr. 4xx electives within option
- 10-12 cr. culminating course or sequence (capstone: 1-3 courses)

Each option should include:

- writing & communication skills
- quantitative & computational skills
- field and/or laboratory skills
- scientific and professional ethics

Proposal

Each track should have a culminating experience ("capstone")

Current examples

ESS 401 Summer field geology (12 credits)

Environmental Geochem capstone: a foundations class, an applications (lab) class and professional practice seminar (11 cr)

Engineering Geology capstone: a foundations course, an applications (field) class and the professional practice seminar (10 cr)

Data science capstone (under development)

In progress:

A specific proposal for faculty review early in Autumn quarter:

- Requirements and electives for each track
- Teaching responsibilities
- An ideal biennial schedule
 - Distribution of teaching load
 - Number of courses at each level
 - Distribution of courses throughout the year
 - Sequencing of courses

Look for (and read) materials that you receive during the summer.

MESSAGe 2.0

Update to faculty 2 June 2023

MESSAGe 2.0 proposed program (starting Sept. 2024)

Maintain a 50-credit, 18-month, applied geology program Cohorts of ~15

Course-based MS program, culminating in:

- > a portfolio of written work based on course projects, and
- > an oral comprehensive exam, based on coursework

Year 1: Coursework. Students complete three or more 5xx courses with culminating projects (drawn from <u>existing</u> offerings).

Year 2: Students revise projects and present their portfolios to a panel of outside experts (local geology professionals + faculty). Comprehensive exam questions drawn from coursework.

MESSAGe update

Agreement from 4xx/5xx profs. to participate (include final projects in portfolio review, provide questions for comps, participate in comps)

Commitment from one or more faculty to teach hydrogeology regularly

Define specific responsibilities for program director, program coordinator, steering committee, and advising staff

Review and update specific program requirements for students

Review and update program budget and tuition plan

Review and update recruiting and admissions plan

MESSAGe update

Specific proposal for faculty approval in early Autumn

Recruit and admit a "beta" cohort to begin in Fall 2024

Formalize changes through graduate school.

Reminder: There is significant demand from employers for this program. Starting salaries for our graduates are competitive.

ESS Computing Committee Updates

- New 3D printer is here (in JHN 029) & available for use!; instructions available (soon if not already)
- Updates to ESS information security policies (Administrative Policy Statement – APS 2.6)
 - updated implementation testing & adding MFA for offcampus connections
 - o added backup solutions for BareOS (PNSN piloted)
 - updated vendors, adding Macs
 - more on annual updates <u>here</u>
 - full policy <u>here</u> (important sections for all: 4.2, 4.3, 4.4, 4.8, 5.1; for groups w/ shared machines: 4.6, 5.4, 9.2)
 - o particular attention for those handling student data, HR
- Current & growing challenges for ESS IT...

comphelp@ess Needs Help! (1/2)

Problem Requested computer support >> available staff hours Extent average hours perweek

Emily		Koji		Nathan	
Linux upgrades	10	Windows deployments	8	Deep support	20
Task automation	6	Test hardware	8	ResGrp support	10
ResGrp OS upgrades	4	Move equipment	8	Training	10
Hardware upgrades	4	First responder	8	Ongoing projects	10
Training	4	Training	8	Host updates	4
Linux deployments	4	Total	40	Quote/purchase	4
From Koji	4			Misc .	4
Misc	4			Total	62
Total	40				

Backlog automation tasks, backups, testing updates, documentation, checkout pool

comphelp@ess Needs Help! (2/2)

Origin how did the problem arise?

- retirements: loss of experienced personnel
- ► UWIT, CTE¹ decreased support; finance changes
- growing number of supported machines
- ▶ 4 tech-savvy groups → 12 groups plus individuals
- time-consuming one-off tasks (deep support)
- ▶ $2 \rightarrow 88$ web servers; $3 \rightarrow 20$ web applications
- help anyone in need

Remediation some policy changes

- restrict support activities
- encourage hardware standardization

¹Classroom Technology Equipment

Overview of a proposed formal policy

- clear descriptions of what is/is not supported
- Support levels: (basic, ECS²) → (basic, ECS-lite, ECS)
 - 1. basic: free, default, limited in scope
 - 2. ECS-lite (new category): single nominal fee
 - 3. ECS: more complex fee schedule, more support
- ticketing system (this summer) for request submittal
- requests are prioritized by severity and urgency
- process to include new support activities
- ▶ details at https://intranet.ess.uw.edu/intranet/public files/ess it support overview.php

²Enhanced Computing Services

Context: Present/proposed computing support

- "established" support < new policy < present (unsustainable) support</p>
- established support from New Faculty Onboarding Document:

basic service

1. one desktop computer in your office; access to building network

enhanced service

- 1. one desktop computer in your office; access to building network
- 2. installation and support of unix/linux systems
- 3. access to software, such as Matlab/IDL on departmental machines
- 4. help setting up backups and system security
- 5. consultation on design, installation, set-up, and maintenance of more complicated facilities (labs, etc.)