## CNHS Retention Initiative Request November 11, 2019

submitted by Emmanuel Otu, Dean-CNHS

Attachment #1 shows headcount losses for new entering students (e.g., 2014 cohort – 25.6% Y1 to Y2) and transfer students (e.g., 2014 cohort – 34.0% Y1 to Y2). There are losses for Y2 to Y3 and Y3 to Y4 as well. The financial implication of the 2014 Year 1 to Year 2 headcount loss example is over \$1 million (calculated at full-time 12 credits enrollment of \$3,694).

Attachment #2 shows 8.5-11.8% more students who took the following courses AHS 101, BIOS 114 and HESM 210 (N = 707), are retained compared to the students who did not (N = 1076). These are introductory seminar-type courses.

In Fall 2014, Drs. Noto, Richards and Taft, in the Biological Sciences Department, received a WisCamp grant to pilot introduction of a research type course in Biological Sciences – BIOS 207. Although a smaller sample size, the retention of students who took this course in the first two years it was offered was 93%.

Last academic year (and continuing this fall 2019 semester), Department Chairs in CNHS were encouraged to discuss developing and requiring seminar-type courses, at the 100-level, within their programs. There is overall positive inclination to doing so – developing a college-wide one (1) credit seminar course that will be required for students graduating from any program in CNHS. For a placeholder, let me code and title the course "CNHS 101 – First Year Seminar in the College of Natural and Health Sciences".

Here are some progress/plan to the effect:

- 1. Applied Health Sciences Already has AHS 101 (3 credits); will retain this course and add a CNHS 101 'true', while putting more subject content into AHS 101 to be taken after CNHS 101.
- 2. Biological Sciences Add CNHS 101 for all Biological Sciences undergraduate programs.
- 3. Environmental Studies Add CNHS 101, and a second-year ENVS seminar-type course.
- 4. Chemistry Add CNHS 101; already has CHEM 155 (3 credits) to be taken after CNHS 101.
- 5. Geosciences Add CNHS 101
- 6. Health, Exercise Science and Sport Management Current curriculum changes in the department have two courses positioned to meet CNHS 101 goals. Already has AHS 210 (3 credits) to be taken subsequently.
- 7. Mathematics and Physics Add CNHS 101.
- 8. Nursing Add CNHS 101.
- 9. Psychology Add CNHS 101.

The plan is to convert BIOS 114 (developed and being taught by Dr. Bryan Lewis) to CNHS 101 requirement – the 'true' first year seminar-type course. All CNHS entering freshmen will be required to take this course. Transfer students to CNHS with less than 30 transfer credits will be required to take the course. Students will be placed in relevant sections. For example, all Applied Health Sciences freshmen will be placed in the same section(s). If the entering student number is low, for example, students in the physical sciences – Chemistry/Geoscience/Physics will be placed in the same section(s). The goal is to afford students relevant references while presenting the same content to all students.

Typically, 40-42% of each year entering cohort of freshmen/transfers chose programs in CNHS. The estimate is that 400-450 new students come into CNHS every year. The planned design is to cap sections at 20-24. Hence 16-20 sections would be offered each academic year.

The goal is to increase retention for each program in CNHS by 5-10% over a three-year period (CNHS Fall 2018 FF retention is 73.4% - IRA 9/2/19). Interactive teaching environments as would be afforded in CNHS 101 course has been recognized nation-wide to increase inclusion and retention of underrepresented students.

Instructors will be drawn from graduate students, academic staff, instructional academic staff and faculty who will be committed to the initiative. There will be a one-day workshop every year, in August when faculty/IAS are in contract, to specially train instructors who will teach this course. The compensation per section will be set at \$1,250 - \$25,000 per year (\$75,000 for three years). This proposal requests 50% funding from central funds to pilot the offering of 'CNHS 101' for three years. Thereafter, the college will seek full support from central funds. Expected net financial gain = \$75,000 (5% retention gain on 400 student) per year — 20 students retained taking 12 credits or more.