REPORT OF THE FACULTY SENATE AD HOC DISCOVERY REVIEW COMMITTEE

August 31, 2015

<u>Discovery Program Review Committee:</u>

David Richman - COLA; Committee Chair

Benjamin Bertrand – Undergraduate Student (class of 2015)

Jessica Bolker - COLSA

Jim Connell - CEPS, EOS, & Faculty Senate

Todd DeMitchell – COLA, Faculty Senate & Discovery Committee

Richard England - PCBE

Marc Hiller - CHHS *(Note: Prof. Hiller was unable to serve and withdrew from the committee.)*

Ted Kirkpatrick - COLA; Associate Dean

Stephen Pugh - UNH-Manchester & Discovery Committee

Barbara Prudhomme White - CHHS; Faculty Director, Discovery Program

INTRODUCTION
The Faculty Senate (FS) established the ad hoc Discovery Program Review Committee in the fall of 2014 (Senate Motion XIX-M3). (A 5-year review had been recommended at the time the Senate adopted the Discovery Program.) The FS Agenda Committee, in conformance with the motion, appointed the committee members (title page) and prepared the formal charge (See Appendix for full text of the Faculty Senate Charge).

The committee was given the task of identifying "the strengths, weaknesses, and the unexplored opportunities for the Discovery Program, specifically for Inquiry, Discovery in the Disciplines, and Capstone courses."
The committee framed two over-arching questions to address the FS charge:
- How well does the current curriculum and structure meet the goals of the Discovery Program?
- Is there sufficient flexibility in the Discovery Program to meet the restrictions and challenges of diverse majors?

METHODS
The committee chose to approach our task in the following manner:
1. Pool our collective knowledge and experience of the Discovery Program. Some of us have served or still serve on the Discovery Committee. All of us teach Discovery courses, take or have taken such courses, or administer aspects of the Discovery Program on the college or University level.
2. Review reports provided by the Discovery Program office that summarized descriptive information about the program; including, numbers of seats in categories, numbers of courses reviewed by the Discovery Committee, reviews of course syllabi, etc. All reports submitted to the 5-Year Review Committee, including data files on which this full report is based, are available on BOX by contacting the Discovery Program office.
3. Review questions identified by the Discovery Committee for discussion. These included:
   a. A request to review the Social Identity Attribute Proposal put forward to the Faculty Senate AY 13-14 and tabled pending the 5-Year Review recommendations. The Discovery Committee is in favor of adding a social identity attribute to the core curriculum, and acknowledges that adding to the core requirements without accommodations in flexibility is a difficult endeavor.
   b. A request to review category descriptions. This emerged from concerns that at least one category (e.g. FPA) is vague and can be interpreted in different ways by different readers. This is particularly relevant for articulation agreements, transfer credits, and student petitions.
   c. A request to investigate other possible solutions to maintaining the "right" number of Discovery courses in categories. The manner in which courses are put forward to Discovery, especially new ones, is perceived as problematic to faculty. The term "decommission" is associated with this problem although this perception may not be accurate. This is also a significant concern in the Faculty Senate.
4. Create and administer a comprehensive survey, distributed as widely as possible to students, faculty and staff, collecting both quantitative and qualitative data.
   (A copy of the survey and quantitative and qualitative survey results is available on BOX by contacting the Discovery Program office.)
5. Couple the survey responses with our own knowledge and experience, and arrive at findings, conclusions and substantive recommendations.

Some of our work was done throughout the year by continuing email conversation, and we met three times for a total of nine hours of intense discussion. Registrar, Andy Colby, joined these discussions as a non-voting participant; we are grateful to him for the information and counsel he

provided. We devoted the majority of these nine hours to the following question: What structure of requirements would maintain the essential integrity of a liberal arts core curriculum while allowing for sufficient flexibility for both highly proscribed majors as well as promote depth of study in desired interests?

The committee did not expect to achieve unanimity in our discussions. We agreed to forward to the Faculty Senate all those recommendations that commanded a substantial majority in favor. Todd DeMitchell was unable to attend our third and final meeting. David Richman, committee chair, did not cast any votes. Thus, for a few of our votes, taken at our first two meetings, we had eight voting members; for the majority of our votes, taken at our third meeting, we had seven voting members. A summary of our twelve recommendations can be found at the end of this report.

FINDINGS
Summary of descriptive reports provided by the Discovery Program office:
In general, no concerns emerged regarding the management of the Discovery Program itself. Various reports were submitted that demonstrate we have sufficient seats being offered to meet student core curricular requirements, and in fact, an overabundance in some categories (e.g. ETS). The office itself appears to run efficiently, and manages a variety of data collection activities that address its mission to oversee the program. Further, comments from the survey regarding course submission processes suggest that there are no concerns and that the office is meeting its mission.

Brief Summary of Survey Results
(Data files on which the full report is based are available on BOX by contacting the Discovery Program office.)

The survey was created with questions both factual and opinion based.   In some cases, questions were deliberately intended to measure perception. Some questions (n=14) were common to students and faculty/staff; others were directed only to students (n=5) or faculty/staff (n=9). Copious opportunities were provided for written comments; indeed, comments were contributed on 21 questions, ranging from 10-185 comments. A total of 6 e-mailed comments were also received: 4 from students and 2 from faculty/staff. We incorporated these comments into the qualitative results.

Quantitative data
A total of 1516 individuals completed most or portions of the Qualtrics Survey designed by the review committee. Of these, 1324 were undergraduate students, 48 were staff advisors, and 144 were faculty. Of faculty respondents, 96 were tenure-track, and 85 reported teaching a course within the Discovery Program; the majority (60%) were from COLA, while COLSA & CEPS comprised 25%, and the remaining respondents were dispersed among the other colleges. Fifty-five faculty reported teaching an Inquiry course.

Close to half (49%) of **ALL respondents** believed that the Discovery Program adequately or substantially met the curricular goals as stated (http://www.unh.edu/discovery/faculty-resources). Applying a rating scale of 0-4 (0 = no opinion, 1= strongly disagree, 2= disagree, 3 = agree, and 4 = strongly agree) results were as follows for several *key* questions. See Table 1, All Respondents, below:

Table 1 - All Respondents   (range 952-1008 responses per question)

Question	Mean S.D.	0 # %	1 # %	2 # %	3 # %	4 # %
1. There is sufficient flexibility to meet the needs of diverse majors. (n =996)	2.33 .98	32 3%	194 19%	257 26%	437 44%	76 8%
2. Approve of Discovery Program Goals. (n = 1008)	2.81 1.07	314 31%	98 10%	99 10%	423 42%	74 7%
3. There are enough Discovery courses in all areas to meet student needs. (n = 969)	2.37 1.04	37 4%	179 18%	254 26%	385 40%	114 12%
4. There are adequate course choices. (n = 976)	2.28 .99	34 3%	192 20%	297 30%	369 38%	84 9%
5. The Discovery Program offers what students want in addition to what they need. (n = 967)	2.20 1.00	37 4%	224 23%	282 29%	354 37%	70 7%
6. The timeframe for course requirements completion is reasonable. (n = 975)	2.62 1.02	32 3%	127 13%	183 19%	466 48%	167 17%
7. There is sufficient diversity in the courses offered. (n= 952)	2.46 .99	36 4%	135 14%	233 24%	444 47%	104 11%

0= No Opinion
1=Strongly Disagree (*inadequately meets)
2=Disagree (*barely meets)
3=Agree (*adequately meets)
4=Strongly Agree (*substantially meets)

The data show that there were very few respondents who had No Opinion about the questions. The range for questions 1, 3,4,5,6, & 7 for No Opinion was 3 to 4%. However, it is noteworthy that "Question #2 Discovery goals are met" had a 31% No Opinion response (N=314). The distribution for the other 69% responses is 10% for response 1, 10% for response 2, 42% for response 3, and 7% for response 4. While the mean of 2.81 is between disagree and agree, those who responded

with an opinion, when the Strongly Disagree and the Disagree responses are collapsed (N=197) and compared with the collapsed Agree and Strongly Agree (N= 497), 28.4% disapprove of the goals while 71.6% approve of the goals. The fact that only 27, 14% of all respondents, were faculty leaving 86% as students, may mean that the students have no opinion because they have no knowledge of the goals.

Continuing the analysis of the collapsed scales, four of the seven questions (1, 3, 6, & 7) had a percentage greater than 50% agreeing/strongly agreeing. Question 6 on the timeframe had the highest percentage at 65%. Question 5 had lowest agree/strongly agree response (44%).

Further, when asked if they would like to see more flexibility in meeting Discovery requirements, 80% said "yes."

Half of **faculty respondents alone** (51%; N = 144) believed that the Discovery Program adequately or substantially met the curricular goals as stated (http://www.unh.edu/discovery/faculty-resources). Applying a rating scale of 0-4 (0 = no opinion, 1= strongly disagree, 2= disagree, 3 = agree, and 4 = strongly agree) results were as follows for several key questions. See Table 2, Faculty Responses, below:

Table 2 - Faculty Only Responses   (range 93-110 responses per question)

Question	Mean S.D.	0 # %	1 # %	2 # %	3 # %	4 # %
1. There is sufficient flexibility to meet the needs of diverse majors. (n =101)	2.51 1.11	8 8%	11 11%	17 17%	51 51%	14 14%
2. Approve of Discovery Program goals. (n = 110)	3.30 .95	27 25%	15 14%	12 11%	46 42%	10 9%
3. There are enough Discovery courses in all areas to meet student needs. (n = 100)	2.34 1.22	14 14%	7 7%	23 23%	43 43%	13 13%
4. There are adequate course choices. (n = 101)	2.29 1.12	14 14%	3 3%	31 31%	46 46%	7 7%
5. The Discovery Program offers what students want in addition to what they need. (n = 98)	2.09 1.13	16 16%	7 7%	30 30%	42 42%	3 3%
6. The timeframe for course requirements completion is reasonable. (n = 106)	2.62 1.02	5 5%	10 9%	18 17%	54 51%	19 18%

7. There is sufficient diversity in the courses offered. (n= 95)	2.35	14	5	18	50	8
	1.18	15%	5%	19%	51%	8%
8. Approve of Inquiry course goals specifically. (n=110)	3.31	5	2	1	48	53
	.95	5%	2%	1%	44%	48%
9. There are enough Inquiry courses to meet student needs. (n=93)	2.08	19	8	22	35	9
	1.30	20%	9%	24%	38%	10%

0= No Opinion
1=Strongly Disagree (*inadequately meets)
2=Disagree (*barely meets)
3=Agree (*adequately meets)
4=Strongly Agree (*substantially meets)

Two questions (1 &2) on the Inquiry Program (not included in the All Responses table) showed a range of 5 % (1 & 8) to 25% (3) for No Opinion. Collapsing the Strongly Disagree and Disagree, and Agree and Strongly Agree, show that three questions (2, 5, & 7) have less than 50% of the responses. All three of these questions refer to student needs in Inquiry and Discovery offerings. The largest percentage of faculty responses that were Agree or Strongly Disagree is on question 1, Approve of Inquiry course goals. The responding faculty also believe that the timeframe requirements for graduation are acceptable (69%) and that there is sufficient flexibility to meet the needs of diverse majors (65%).

When asked if faculty (n=106) would like to see more flexibility in meeting Discovery requirements, 62% said "yes." This response is consistent with the responses for 2, 5, & 7 on meeting student needs. However, the response to question 4 supports the flexibility for diverse majors.

In broad summary, all respondent perspectives trended toward desiring more flexibility in the program. Faculty appreciated and agreed more favorably with the goals of the core curriculum than did students, who often expressed in comments that they did not understand why they were taking courses outside of their majors. There also was agreement that there did not appear to be enough seats or enough diversity in Discovery courses and in some categories.

Qualitative:
A thematic analysis of over 300 comments made in the survey resulted in this summary:

1. **A general embracing of the broad goals of the Discovery Program but the program needs a strengthened reputation with students and to some extent faculty/staff as well.**
   1.1. Students differed from faculty/staff perceptions. Based on their comments, students seem to make little connection of Discovery intentions to goals of a liberal arts education, and the value therein. A number of students' commented that they would rather prepare for their majors and not be required to take courses outside of their chosen disciplines.

   1.2. WI is recognized as a core curricular requirement, and current delivery does not seem to be of great concern among faculty/staff (e.g. although a few suggestions were made).

Students commented on some unevenness in WI courses.

    1.3. While some categories have sufficient (and in some cases too many) seats, there was an expressed need for more FPA and HP courses.

    1.4. Students complained about having static course choices year by year.

2. **The Inquiry goals seem about right, at least by faculty/staff commentary. However, comments include suggestions for improvement:**
    2.1. Inquiry goals are laudable. Concerns were expressed regarding how well these are delivered (e.g. concerns about some unevenness in INQ delivery); how well they are defined; additions would include content related to social justice.

    2.2. In general, faculty/staff members embrace the Inquiry goals more than do students. Student comments appear related to not understanding the intent of INQ or not recognizing that they are in an INQ course. In general, students trended toward not being aware of Inquiry goals; as well as, not being aware of overall intentions of the Discovery Program.

3. **The program needs strengthening and more flexibility. Examples included**:
    3.1. Goals are right, but program is not being delivered as intended.

    3.2. Not enough choices of classes. Too much repetition. Suggestions included allowing courses to be moved in/out of Discovery to avoid core repetition, giving more choices for students.

    3.3. Students who would like to broaden their interests but feel they cannot squeeze in chosen classes (e.g. CEPS student with business interests). In general, students trend toward negative comments about the requirements and see them as burdensome, or not relevant. Suggestions included: allowing major courses to fulfill a category (COLA primarily); allowing significant experiences to count; having fewer categories.

    3.4. Open up opportunity to those who would develop sub-interests (e.g. like cognates);

    3.5. Opportunity to those who wish to see life experiences count (e.g. other experience beyond WC);

    3.6. Allow courses within majors to count toward general core (greater transfer flexibility; double counting allowed within majors in COLA);

    3.7. Add in a social identity/diversity requirement.

4. **Discovery office processes and course review appear to work well.**
    4.1. In general, comments are positive, with only 1-2 exceptions.

5. **The Discovery Dialogue is under-recognized.**
    5.1. Results showed that there is a marked lack of knowledge about and participation in Dialogue events, even though in general there was a positive trend toward liking the goals of the program.

CONCLUSIONS

We summarized the two most substantial critiques of the program to emerge from the survey as follows:
A. Students and faculty perceive the Discovery Program to be too restrictive and inflexible.
B. Faculty members perceive the Discovery Program to offer (at least some) courses that don't meet minimal academic standards (i.e. are 'inter-disciplinary lite').

Further, our email exchanges, personal conversations and data from this study supported our beliefs that too many students were "checking boxes," "getting required courses out of the way" and generally not appreciating the genuine benefits of a core liberal arts curriculum.
Our conclusion was buttressed by comments elicited by the survey. Here is a representative sample from students and faculty. These quotations serve as exemplars of the comments we received.

"I think there should be more discovery course options. I am a CEPS Major and have never taken, or had the opportunity to take, a business class. I think there should be more flexibility in the Discovery Program."

"The combination of poor attitude and large-class logistics makes cheating both tempting, and easy - and there is a lot of it, which further undermines motivation (especially for the students who are actually doing the work)."

"It is my understanding that people in college are there to further their education and will naturally explore courses outside their major but the discovery program requires too many fields to be covered which takes up credits and discourages students from making their own discoveries. UNH needs to encourage students to take classes which interest them. The supposed Discovery groups need to be more broad."

"The discovery classes were very general, and many people I met took them with the goal of getting them out of the way."

"Too many requirements, too shallow exposure (intro courses only). Despite what faculty think, students think of DISCOVERY as a check-off."

"I would rather have a biology student with a greater knowledge of history or economics via a minor than someone who took one history class, one FPA, one humanities, one social science, etc. They would know something of substance rather than have forgotten what little they learned in a one-time exposure."

It became clear to us from the comments we received that both students and faculty perceived there were too many restrictions in meeting course requirements and that students were prevented from pursuing genuine interests in depth. This appears particularly to be a concern for our best students, who could well benefit most from additional flexibility and the opportunity to pursue depth beyond the introductory courses.

We concluded that the requirements in writing and in quantitative reasoning are indeed essential elements of any college education, and we therefore recommend no change in either the basic writing requirement or in the quantitative reasoning requirement.

As noted above, we devoted the bulk of our time to the Discovery categories. We discussed two counterarguments:
1. Many, perhaps most, students are best served when they are told which courses they must

take.

2. Any reduction in the eight categories would result in a student completing four years of college without taking, say, a course in biological sciences or a course in fine and performing arts. We referred back to the overall goals of the curriculum as a guide for our collective intentions as a faculty, recognizing that any reduction in Discovery categories would necessarily sacrifice breadth for a possible gain in depth. However, the broad learning goals described in our learner outcomes for the core curriculum are not aligned with specific discipline per se. Rather for example, "learning scientific thinking" crosses disciplinary boundaries, as does appreciating human creative endeavors.

Possible Changes to Structure of Discovery Requirements

We voted on keeping the current structure (eight categories, one required course in each category) unchanged. **The vote was: one in favor, four against, two abstain**.

A majority of our committee believes that some change in existing categories and requirements must take place. Thus, we recommend that the Faculty Senate make changes in existing categories and requirements.

We discussed many possible variations and at length discovered that two of these commanded a majority of our committee. We present these as alternatives, and we recommend that the Faculty Senate begin their deliberations with these options:

A. *Replace existing eight categories with four categories. Each student must take two courses in each of the four categories.* The four categories are:

    1. Historical & Global Perspectives (History, World Cultures)
    2. Arts and Humanities (Philosophy, Political Science, Fine and Performing Arts, Languages & Literature)
    3. Social Sciences (Psychology, Sociology, Anthropology, Economics, Business)
    4. Natural and Physical Sciences and Math (Biology, Physics, Math, Chemistry, Geology, Engineering, Astronomy, Agriculture)

        This alternative commanded a vote of four in favor, one against, two abstain.

B. *Replace existing eight categories with six categories. Students must take one course in each of the six categories, plus any two courses outside the category of their major.*
The six categories are:

    1. Arts and Humanities
    2. Natural and Physical Sciences
    3. Social Sciences
    4. Historical Perspectives
    5. World Cultures
    6. Environment, Technology and Society

        This alternative commanded a vote of five in favor, one against, one abstain.

Proposed Change in Wording Regarding What Counts Toward Discovery Requirements

The survey also produced a number of comments to the effect that students neither wanted nor felt that they needed to take a required course in the area of their major (e.g., a Theatre Dance major taking a Fine & Performing Arts category course). We recognize that many majors have a legitimate interest in requiring their students to take a related course outside the major, yet in the same Discovery category as that major.

We recommend that such choices be left to individual majors--but, as a matter of policy, neither

the Discovery Program nor the colleges should exclude or disallow "double counting." In other words, a student who takes a Discovery course to satisfy a major requirement should be permitted to use that same course to satisfy a Discovery requirement. Department or major faculty are free to add to Discovery requirements, but not to override them: if the Discovery Program says the course meets Discovery requirements – it counts.

We note that this recommendation is not meant to preclude, and does not preclude, an individual major from requiring its students to take an additional course in the area of that major.   To reiterate, this recommendation does not preclude a faculty in any department or program from requiring its majors to take an additional course outside their major in that Discovery category.

We voted on the proposition: *In principle all Discovery courses count toward fulfilling the designated Discovery category requirements.* **The vote was eight in favor, zero against, zero abstain.**

Capstone
We discussed the Capstone projects, but we decided that, since these are managed within individual majors, we have no useful recommendations on capstones to make.

Course integrity and rigor
We addressed the survey-elicited comments that some Discovery courses lack, or have questionable, rigor. We noted that the Discovery Committee tracks changing syllabi and changing instructors of existing Discovery courses. We voted on the proposition: *That the Faculty Senate empower the Discovery Committee to review existing courses and inform departments should it judge that any courses have fallen below reasonable university standards.* **This proposition commanded a vote of seven in favor, one against, zero abstain.**

We therefore recommend that the Faculty Senate empower the Discovery Committee to review all discovery courses for academic standards, and inform departments should it judge that any courses have fallen below reasonable university standards.

Category Seat Dispersion *(For enrollment data, please refer to files on Box.)*
We addressed the issue that there are a few very large courses to which students flock because these courses, fairly or not, have a reputation that they require little work and issue good grades. These large courses also draw students away from other, smaller courses in the same category. Students, for example, may gravitate toward Introduction to Theatre rather than Art History or Music History or Theatre History. We voted on the proposition: *That all Discovery course seats be capped to a total of all sections in one semester at 400.* **This proposition commanded a vote of four in favor, zero against, three abstain.**

We therefore recommend that, with exceptions to be determined by the Discovery Committee, large discovery courses be capped at 400 per semester. For courses taught in multiple sections, the total number in all sections for a given semester should be capped at 400.
Note: The proposed cap of 400 seemed to us to make the most sense. We note however that this number may require further discussion. Such discussion may best occur in consultation with the Associate Deans.

Category Seat Management
We discussed the difficult and inflaming problem caused by the word "decommissioning" as that word is applied to discovery courses. We note that the idea that one discovery course must be "decommissioned" before a new discovery course can be created may call forth justifiable anger among many faculty--and we are aware that this has been extensively discussed in the Faculty Senate. We are also aware that the practice grew out of difficult and delicate negotiations among

the Associate Deans. At the very least, we note that "decommissioning" is a controversial word. Perhaps a given discovery course can become temporarily inactive as a new course is created. We note that the Discovery Program and the Registrar track discovery courses that have not been taught for a given period.

We took two votes in relation to this practice:

1. We voted on the proposition: *That the Faculty Senate empower the Discovery Committee to track Discovery courses that have not been taught during the past three years.* **This proposition commanded a vote of seven in favor, zero against, zero abstain.**

2. We voted on the proposition: *That there is a strong perception among faculty that in order to create a new Discovery course, an existing Discovery course in that category must be decommissioned by that college. We recommend that the Faculty Senate strongly urge the Associate Deans to revisit this practice and at the very least reconsider the use of the word "decommissioning".* **This proposition commanded a vote of six in favor, zero against, one abstain.**

Inquiry
We noted that some of the approved Inquiry courses have undergone considerable changes both in syllabi and instructors since they were first approved. We voted on the proposition: *That the Faculty Senate empower the Discovery Committee to track and to report to and discuss with departments changes in syllabi and personnel for the Inquiry courses.* **The proposition commanded a vote of six in favor, zero against, one abstain.**

We therefore recommend that the Faculty Senate so empower the Discovery Committee.

We discussed the efficacy of opening Inquiry courses to other than first-year students. Some of the survey comments suggested that "first year students are not, in general, ready to fully appreciate and benefit from Inquiry courses." The prevailing view of the committee is that Inquiry courses must teach and model the necessary curiosity and discipline required for success in college. First year students can be intimidated or quelled by the presence of students who are sophomores and above. We voted on the proposition: *That all Inquiry courses are strongly encouraged to remain for first year or first year equivalent students (first 32 credits).* **This proposition commanded a vote of six in favor, zero against, one abstain.**

Proposed Change to the Discovery Dialogue
We noted with regret that the Discovery Dialogue, while admired, is little attended and under used. We therefore recommend that the Discovery Dialogue be discontinued, or at least reconfigured to partner with another entity on campus.

Social Identity Attribute Proposal
The Discovery Review committee did not discuss at length a proposed Social Identity Attribute. The Academic Affairs Committee of the Faculty Senate examined this issue, as did the Discovery Committee.

We note that there is support both in the Discovery Committee and from the Faculty Senate's Academic Affairs Committee for the proposition that the Faculty Senate seek ways to include a Social Identity attribute (not an additional category) in a revised and more flexible program, such as within those options described above. Since we ran out of time for extended discussion of this issue, we make no recommendation. We respectfully suggest that the Faculty Senate take up the matter of a Social Identity Attribute only after it has decided on possible changes to the Discovery

Program categories and requirements. Some members of our review committee strongly support the addition of a Social Identity Attribute.   Others as strongly hold that adding yet another requirement (even if it is merely an "attribute"), however worthy, would be a move in the wrong direction.

Summary of Recommendations
1. Writing requirement remains unchanged
2. Quantitative Reasoning requirement remains unchanged
3. Discontinue Discovery Dialogue, or identify a new home with better resources, with which the Discovery Program may then partner as appropriate.
4. Existing structure of eight categories, one required course in each category should be revised.

> Two alternatives: We recommend that the Faculty Senate choose one of the options proposed:
>
> A. Replace existing eight categories with four categories. Each student must take two courses in each of the four categories. The four categories are:
> 1. Historical & Global Perspectives
> 2. Arts and Humanities
> 3. Social Sciences
> 4. Natural and Physical Sciences and Math
>
> B. Replace existing eight categories with six categories.   Students must take one course in each of the six categories, plus any two courses outside the category of their major.
> The six categories are:
> 1. Arts and Humanities
> 2. Natural and Physical Sciences
> 3. Social Sciences
> 4. Historical Perspectives
> 5. World Cultures
> 6. Environment, Technology and Society

5. All Discovery courses count toward fulfilling the designated Discovery category requirements. We note that this recommendation is not meant to preclude, and does not preclude, an individual major from requiring its students to take an additional course in the area of that major.   To reiterate, this recommendation does not preclude a faculty in any department or program   from requiring its majors to take an additional course outside their major in that Discovery category.

6. Faculty Senate empower the Discovery Committee to review all discovery courses for academic standards, and inform departments should it judge that any courses have fallen below reasonable university standards.

7. With exceptions to be determined by the Discovery Committee, large discovery courses should be capped at 400 per semester. For courses taught in multiple sections, the total number in all sections for a given semester should be capped at 400.

8. Faculty Senate empower the Discovery Committee to track and to report to and discuss with departments changes in syllabi and personnel for the Inquiry 444 and Inquiry Attribute courses.

9.   All Inquiry courses are strongly encouraged to remain for first year or first year equivalent students (first 32 credits).

10. Faculty Senate empower the Discovery Committee to track Discovery courses that have not been taught during the past three years.

11. There is a perception among faculty that in order to create a new Discovery course, that college must decommission an existing Discovery course in that category.   We recommend that the Faculty Senate urge the Associate Deans to revisit this practice   and, at the very least, reconsider the use of the word "decommissioning".

12. Faculty Senate empower the Discovery Committee to conduct a category description review and make recommendations to the Faculty Senate. The purpose of this review is to tighten and clarify any category description that is open to wide variation of interpretation.

ADDITIONAL COMMENTS:

1. Our student representative urged, and we agree, that every teacher of every discovery course tell students, on the first day of classes, what discovery is for, what it accomplishes, why it is in students' interests to be at least minimally aware of branches of knowledge and endeavor outside their chosen fields.
2. That all syllabi from courses taught within the Discovery Program note the category and attributes for which the student receives core curricular requirement credit. This follows along with recommendations made by the Faculty Senate and the Student Senate.

APPENDIX
Charge to the Discovery Program Review Committee
10.30.2014
Agenda Committee of the Faculty Senate

The Faculty Senate established the Discovery Program Review Committee on September 22, 2014 (Motion #XIX-M2) with the charge to review the Discovery Program. The motion also charged the Agenda Committee with the development of the program review questions, which shall guide the formative review at this five-year mark of implementation. The formative evaluation seeks to understand if the goals are being met in a timely and efficient manner through analysis of implementation strategies and processes and clarification of problems in its implementation. The Faculty Senate, in consultation with the Discovery Committee will make adjustments based on the analysis.

The Discovery Program has the following requirements. This document and backup materials shall constitute the program for purposes of this review.

Preamble
The Discovery Program provides the intellectual framework for students in any major. It represents the faculty's collective belief in what constitutes and contributes to essential knowledge of the world. Together, students and faculty attempt to understand fully and use ethically that knowledge, both in the present and as a reservoir from which to draw in the future. (http://www.unh.edu/discovery/program-requirements-overview)

The Discovery Foundation Skills include:
English 401: Completed in the first year. It fulfills one of the four required Writing Intensive Courses.
Quantitative Reasoning: Normally completed by the end of the first year or 32 credits.
Inquiry Course: Completed in the first or second year.

The Discovery in the Disciplines include:

Biological Science (BS)*	Physical Science (PS)*
Fine and Performing Arts (FPA)	Humanities (HUMA)
Historical Perspectives (HP)	World Cultures (WC)
Social Science (SS)	Environment, Technology and Society (ETS)
*One (BS or PS) must have a Discovery laboratory (DLAB)	

The Senior Year Capstone Experience
The Capstone allows you to reflect on your education and synthesize the knowledge and skills you have gained from your Discovery Program courses and major. The Capstone requirement may be satisfied through a course, created work or product, or some form of experiential learning. Departments may allow honors theses, mentored research projects, and other special student activities to substitute for designated department Capstones. The capstone is approved and directed within your major during the senior year.

The Discovery Dialogue

The Discovery Dialogue, focusing on the grand challenges we face as a society, is an opportunity to engage in the intellectual life of the university. Each year, the university addresses a different theme, presented through experiences in and outside the classroom. It is not a course and does not require registration.

EVALUATION QUESTIONS
Purpose of the Review

The purpose of the review is to identify the strengths, weaknesses, and the unexplored opportunities for the Discovery Program, specifically for Inquiry, Discovery in the Disciplines, and Capstone courses.

The review will cover two aspects of the Discovery Program: (1) its content and structure and (2) its implementation.

Questions about Program Content and Structure

General guiding questions:

- What are the strengths, weaknesses, and the unexplored opportunities of the current curriculum and structure of the Discovery Program?

- How well does the current curriculum and structure meet the goals of the Discovery Program?

Specific questions:

1. Is there sufficient flexibility in the Discovery Program to meet the restrictions and challenges of diverse majors?

2. Inquiry courses are intended to inspire curiosity, develop understanding and perspective taking, clarify standards of thinking, and create effective communicators. How well have these intended outcomes for students been met?

3. What have been the results or outcomes of the Discovery Dialogue? How well has the Discovery Dialogue met its goals?

Questions about Implementation

1. How well is the demand for Inquiry and Discovery in the Disciplines courses being met?

    - In any given semester, are there enough courses and seats to meet student demand?
    - Are students fulfilling their Inquiry and Discipline requirements within the time

frame envisioned in the Discovery Program?

2. What is the distribution of approved Inquiry courses and Discovery in the Disciplines courses among departments and colleges? Is this distribution equitable?

3. What is the range, median and mean of enrollments for Inquiry and Discovery in the Disciplines courses?

   - How is enrollment distributed among the Inquiry and Discipline courses? For example, an English 444 class might have a full enrollment while a Natural Resources 444 class may have only six students. What are the implications of a wide variability in enrollments, if such exists?

4. How many Inquiry and Discovery courses are interdisciplinary? Is this number sufficient?

5. Is the process used by the Discovery Committee to review course applications effective and efficient?