To: Dr. Mike Riggle
From: Rosanne Williamson
Re: New Course Proposals
Date: December 20, 2018

Recommendation:
I recommend that new courses be presented for Board discussion on Monday, January 14, 2019 and that action on this item occur no later than the Monday, January 28, 2019 Board meeting.

Process:
New courses and curricular changes have been thoroughly discussed in each building by relevant departmental and building-level committees, Instructional Supervisors, Associate Principals and building principals. District-level administrators have also reviewed these proposals. The Board will note that they seek to meet the academic needs and interests of students in keeping with a comprehensive high school program. New course proposals, which may require additional FTE, will be covered within the building's authorized FTE allocation.

Building administrators who were closely involved in the development of these proposals will be available at the Board meeting on January 14, 2019 to address questions from the Board.

Board Policy: Curriculum Planning Strategy 7010 (procedures) is included in the packet so that Board members who wish to review our required timelines and forms concerning our process for new course approvals may do so.

Board Policy 7010 and its procedures identifies not only the process for how proposals shall be submitted for Board approval, but also explains what happens after they are implemented as administrators evaluate the success of the change, reporting back to the Board "no later than the end of the third semester that the course is offered." This third semester follow-up evaluation of previously approved new courses will be contained in curriculum reports presented at a future Board meeting.

To: Dr. Mike Riggle, Dr. Rosanne Williamson
From: Dr. Ed Solis
Cc: Dr. John Finan
Re: Curriculum and Course Adoption Proposals
Date: November 2018

Glenbrook North High School
Curriculum and Course Adoption Proposals for 2019-2020

The Glenbrook North Instructional Leadership Team met on November 7th and agreed to recommend the following new course proposals and curricular changes for your approval. In addition, GBN's Curriculum Council reviewed and approved these proposals on October 18th. These courses/changes meet with the approval of the principal and both associate principals. Please let me know if you have any additional questions.

I. Glenbrook North proposes the addition of these new courses:

Course Proposal	Course Title	Status	Rationale	Impact on Budget, FTE, Facilities	Evaluation
Physical Education	Sport and Fitness	New Course	Sport and Fitness will combine the curriculums of Lifetime Sports and Team Sports into one class. By combining these courses, we are able to offer activities that the students can use well after high school. We will offer new units such as swimming, yoga, and self-defense, while archiving less relevant units of study.	The change allows for greater flexibility of facility usage and for scheduling off-campus activities. No additional staffing or budgetary needs are necessary. This change could potentially reduce the number of field trips scheduled during the school year.	The Instructional Supervisor of Physical Education will give feedback on the class and curriculum and the teachers will keep the IS updated on the progress of the class. The number of students registered for the class will be monitored.

Course Proposal	Course Title	Status	Rationale	Impact on Budget, FTE, Facilities	Evaluation
Physical Education	Total Body Conditioning	New Course	This class will give students an opportunity to participate in a variety of fitness activities and will keep Glenbrook North in step with current fitness and health trends. Students will develop proper techniques and gain experiences to help lead a healthier and fit life. This course is currently offered at GBS.	Staff members are qualified to teach this class. These teachers will continue to attend professional development opportunities to keep current with fitness trends and new workouts to add to the curriculum. This class will be offered per semester and will need specific facility scheduling to get access to the dance studio to hold class.	Student growth will be monitored and measured. Pre and post fitness results, student surveys, and teacher feedback will help to evaluate course success.
Course Proposal	Course Title	Status	Rationale	Impact on Budget, FTE, Facilities	Evaluation
Math	Advanced Data Structures and Algorithms	New Course	Adding this course to our curriculum gives students more opportunities in computer science education. Students will develop skills to become more creative and powerful programmers.	There would likely be 1 or 2 sections at GBN, which will be held in the Math Computer Lab, room A200.	Consistent student enrollment will help us measure success. We can also monitor college preparedness and the number of student pursuing pathways in CS at the collegiate level.

Course Proposal	Course Title	Status	Rationale	Impact on Budget, FTE, Facilities	Evaluation
Science	History and Philosophy of Science 161 (Summer School)	New Course (Semester)	NGSS Standards encourage high schools to afford students the opportunity to engage in discovering the in-depth connections among all science disciplines. This course will provide a venue for students to appreciate the historical context of scientific discoveries and exercise presentation, discussion, research and writing skills. Students will utilize models in science to help explain patterns and relationships across all areas of science.	Because this course is proposed as a summer school course, enrollment will be based on the summer school formula. As a result, there is not a need for additional FTE.	The success of the course will be evaluated in part by continued student interest in the elective. Students will be surveyed upon completion of the course to gather instructional and experiential feedback.
Course Proposals	Course Title	Status	Rationale	Impact on Budget, FTE, Facilities	Evaluation
Science	Integrating Physics and Chemistry 163	New Course	Integrating Physics and Chemistry is designed to eliminate the student's need of possessing a substantial math background in order to achieve success in a full-year lab science course. This course will serve as a third year lab science for those looking to further their education at a 4 year institution.	This course can be taught in either a physics or chemistry room, and would need periodic access to the machining equipment available at GBN.	The course's success will be evaluated in part by continued student interest in the elective. Students will be surveyed upon completion of the course to gather instructional and experiential feedback.

Course Proposals	Course Title	Status	Rationale	Impact on Budget, FTE, Facilities	Evaluation
Science	Organic Chemistry (Summer School)	New Course (Semester)	Organic Chemistry will aim at increasing student interest in chemistry beyond traditional content and expose students to potential careers in bionuclear medicine, biochemistry, pharmacology, and food science, to name a few.	Because this course is proposed as a summer school course, enrollment will be based on the summer school formula. As a result, there is not a need for additional FTE. There will be a small financial obligation to stock the necessary laboratory equipment. Mr. Grdinic completed an innovation grant through the Glenbrook Foundation to help financially support this course. Other equipment and necessary chemicals are in stock at GBN and used in other chemistry courses.	The success of the course will be evaluated in part by continued student interest in the elective. Students will be surveyed upon completion of the course to gather instructional and experiential feedback.

II. Glenbrook North proposes the following level and/or title change for current course offering:

Course Changes	Course Title	Current level	Proposed level change	Proposed Level Change
Level & Title Change: Change *American Studies* title to *American Experience* and offer additional honors level	American Experience	363	373	The new title, *American Experience*, best reflects the unit topics and themes in the curriculum. This title will create consistency with Glenbrook South's title for the same course. The change in level will provide students an opportunity for new challenges while experiencing an interdisciplinary course.

III. Glenbrook North proposes the following courses be archived:

Removal of Course Offerings	Course	Recommended Action	Rationale
Archive	Architecture Studio 363	Archive	There has been no enrollment in this course in the last two years. It is the opinion of the department that with the current course offerings in Technology Education, Architecture Studio 363 has lost relevance to the student body and should be archived.
Archive	Architecture Studio 463	Archive	There has been no enrollment in this course in the last two years. It is the opinion of the department that with the current course offerings in Technology Education, Architecture Studio 363 has lost relevance to the student body and should be archived.
Archive	Small Engines 161	Archive	This course was designed for freshman who were interested in Autos. For the last five years there has only been enrollment for one section each year. It is the opinion of the department that with the addition of offering Autos 161 for freshman this course will lose its relevance and should be archived.
Archive	Advanced Business Topics	Archive	There has been no enrollment in this course in the last three years. It is the opinion of the department that with the current course offerings in Business Education, Advanced Business Topics has lost relevance to the student body and should be archived.
Archive	Team Sports	Archive	This class would be eliminated pending the approval of the new Sport and Fitness course proposal.
Archive	Lifetime Sports	Archive	This class would be eliminated pending the approval of the new Sport and Fitness course proposal.

APPLICATION FOR NEW CURRICULAR OFFERING

School: Glenbrook North **Department**: Physical Education **Date**: 10/9/2018

Name of proposed new course: Sport and Fitness

1. Brief description of the curricular change:

Sport and Fitness will combine Lifetime Sports and Team Sports into one class where an emphasis will be placed on understanding why sports, physical activity, and the achievement of physical fitness are important for maintaining overall health. Sport and Fitness is a continuation of skill development in which students should demonstrate a knowledge of rules, strategies, skill and etiquette required to participate in a variety of activities such as, badminton, basketball, bowling, fitness, golf, pickleball, soccer, softball, tennis, swimming, water polo, and volleyball. Activities designed to promote cardiovascular and muscular fitness will be included in each unit. Enrollment is limited to a total of two semesters over the course of a two-year period (junior and senior year).

2. Curriculum Planning Committee Membership:

a. List the members of the committee.

Bob Pieper, Ryan Dul, Mike English, Matt Purdy

b. Give the rationale for the membership of this committee.

Knowledge in the current curriculum

3. Need for the curricular change:

b. Present other data (demographic, anecdotal, research, and others) that point to a need for change.

Combining Lifetime and Team Sports classes will allow us to combine the activities that the kids enjoy the most into one class as well as incorporate and stay current with new fitness activities.

c. Summarize opinions of experts (researchers, higher educational professionals, business people, parents, community members) who speak to a need for change.

All current research on physical activity shows that students will work harder and participate longer if they are having fun and enjoy the activities being presented.

4. Rationale for addressing the need through a curricular change:

a. State the purpose of the change, indicating specifically how this curriculum change shall improve student learning by meeting the needs described in #3 above.

By combing Lifetime and Team Sports we are able to offer activities that the students can use well after high school, and we will be able to offer new units such as swimming, yoga, and self-defense.

b. If the committee considered other approaches to meeting the needs described above, describe those alternatives and indicate why each alternative was rejected.

This is the best option for our curriculum and facilities.

c. Delineate the ways in which this curriculum proposal, if implemented, shall complement other courses in the department and the school.

The new Sport and Fitness class will fall in line with the progression of our students from the freshman and sophomore curriculum.

5. Description of proposed change:

a. Describe the students for which this curriculum change has been designed and the approximate size of the target group.

This change will be for junior and senior students and will be designed for approximately 300 students during a school year.

b. Provide a tentative outline of the proposed course or program.

We are ready to start the new curriculum in the 2019-2020 school year. Sport and Fitness will combine Lifetime Sports and Team Sports into one class where an emphasis will be placed on understanding why sports, physical activity, and the achievement of physical fitness are important in maintaining overall health. Sport and Fitness is a continuation of skill development in which students should demonstrate a knowledge of rules, strategies, skills and etiquette required to participate in a variety of activities such as, badminton, basketball, bowling, fitness, golf, pickleball, soccer, softball, tennis, swimming, water polo, and volleyball. Activities designed to promote cardiovascular and muscular fitness will be included in each unit. Enrollment is limited to a total of two semesters over the course of a two-year period (junior and senior year).

6. Implications of the proposed change:

a. What are the implications of this proposed change for staffing, facilities, and budget?

The change allows for greater flexibility for facility usage and for scheduling off-campus activities (bowling and golf). No additional staffing or budgetary needs are necessary.

b. What are the implications of this proposed change for other courses in the department and for other departments in the school?

The proposed change will allow students greater opportunity to experience other elective classes such as Aquatics, High Adventure, Strength Training, Dance, Yoga and Total Body Conditioning.

c. What additional resources in personnel and money shall be required before this change is implemented? Shall summer curriculum work be required?

No additional resources needed. No summer curriculum is needed.

7. Method of evaluating the success of the proposal after it is implemented:

a. If the proposal is approved and implemented, how shall it be evaluated?

- The number of kids that sign up for the class.
- The Instructional Supervisor of Physical Education will give feedback on the class and curriculum.
- Teachers will gather student feedback about the course.

b. What specific outcomes shall indicate success of the implemented proposal?

All juniors and seniors will be allowed to take this class a maximum of two semesters. In a perfect scenario, we would offer eight sections of this class each semester, one each block. We will evaluate based on student enrollment. Also, we will evaluate our State Fitness tests to see if there is improvement from last year with the new fitness activities that will be implemented in the Sport and Fitness class.

APPLICATION FOR NEW CURRICULAR OFFERING

School: Glenbrook North **Department**: Physical Education **Date**: 10/1/18

Name of Proposed Course: Total Body Conditioning

1. Brief Description of the curricular change:

This course offers students an opportunity to develop physical fitness through total body conditioning activities.

2. Curriculum Planning Committee Membership:

a) List the members of the committee:

Beth Figaro
Bob Pieper

b) Give the rationale for the membership of this committee:

Beth Figaro and Bob Pieper have a strong fitness background and feel the need to offer junior and senior students this fitness-based elective physical education class at Glenbrook North. Glenbrook South currently offers this course.

3. Need for the curricular change:

a) Present and analyze data on student learning that point to a need for change.

Students have increasingly shown an interest in adding more fitness-based activities to our classes. This course will offer another option for a physical education class that focuses on fitness. Currently, Glenbrook South offers multiple sections of this class that successfully fill.

4. Rationale for addressing the need through a curricular change:

a) State the purpose of the change, indicating specifically how this curriculum change shall improve student learning by meeting the needs described in #3 above.

This class will give students an opportunity to participate in a variety of fitness activities and will keep Glenbrook North in step with current fitness and health trends. Students will develop proper techniques and gain experiences to help lead a healthier and fit life.

b) If the committee considered another approach to meeting the needs described above, describe those alternatives and indicate why each alternative was rejected.

We feel this will be a great class for the students at Glenbrook North and is a necessary addition to the Physical Education program.

c) Delineate the ways in which the curriculum proposal, if implemented, shall complement other courses in the department and the school.

The committee members are veteran teachers with several years of experience teaching fitness related classes and activities. This class will complement alternative fitness-based classes with new activities and opportunities.

5. Description of proposed change:

a) Describe the students for which this curriculum change has been designed and the approximate size of the target group.

This class will be offered to junior and seniors. The optimal class size would be 30-35.

b) Provide a tentative outline of the proposed course or program.

This course offers students opportunities to develop physical fitness through aerobics and total body conditioning activities. Activities include cardio kickboxing, step aerobics, zumba, resistance training, yoga, spin and fitness center-based workouts. The activities will effectively strengthen and define all muscle groups.

6. Implications of the proposed change:

a) What are the implications of this proposed change for staffing, facilities, and budget?

Many staff members are qualified to teach this class. These teachers will continue to attend professional development opportunities to keep current with fitness trends and new workouts to add to the curriculum. This class will be offered per semester. The class will need specific facility scheduling to get access to the dance studio to hold class.

b) What are the implications of this proposed change for other courses in the department and for other departments in the school.

This class will offer more P.E. options for students during their junior and senior year. There are no implications for other departments.

c) What additional resources in personnel and money shall be required before this change is implemented? Shall summer curriculum work be required?

Additional fitness equipment will need to be ordered (mats, weights, resistance tubes, playground balls). Summer curriculum is not required.

7. Method of evaluating the success of the proposal after it is implemented:

a) If the proposal is approved and implemented, how shall it be evaluated?

Students will be evaluated on their individual fitness technique and skill and will be given written and practical exams. The students will gain physical and psychological benefits through fitness activities. The teacher will be evaluated by the Instructional Supervisor.

b) What specific outcomes shall indicate success of the implemented proposal?

Increased focus and decreased symptoms of anxiety from students. More appreciation, awareness and understanding of their individual bodies. We hope class enrollment will continue to increase.

APPLICATION FOR NEW CURRICULAR OFFERING

School: Glenbrook North Department: Mathematics Date: 9/28/2018

Name of proposed: Advanced Data Structures and Algorithms

1. Brief description of the curricular change:

This new course is a continuation of the AP Computer Science A course. It will be an honors-level course. It will serve as a capstone course for our Computer Science offerings and will meet a growing demand and need for program expansion.

2. Curriculum Planning Committee Membership:

a) List the members of the committee.

Steve Goodman (GBN), Maria Vasilopoulos (GBN), David Rogers (GBS) has served as an advisor.

b) Give the rationale for the membership of this committee.

Steve and David are the AP Computer Science A teachers in each building. Maria is the Math IS at GBN and has worked with Steve to move forward with this proposal.

3. Need for the curricular change:

a) Present other data (demographic, anecdotal, research, and others) that point to a need for change.

Many students are completing AP CS A during their sophomore or junior years (45 at GBN this year) and are looking for more computer science coding courses.

Many surrounding districts offer more courses in Computer Science beyond AP CS Principles and AP CS A (Deerfield/Highland Park, Stevenson, 211, 214, Lake Forest, and more). We need to be able to offer our students similar opportunities for growth and enrichment.

The US Bureau of Labor indicates that in the next 5 years, over 1,000,000 jobs requiring a background in coding/CS will be unfilled. There is a growing demand in the workplace for students with these skills.

The National Center for Women and Information Technology says these skills strengthen local community, national innovation, and opportunities for youth.

Computer Science - not computer literacy - underlies most innovation today, from biotechnology to cinematography to national security.

b) Summarize opinions of experts (researchers, higher educational professionals, business people, parents, community members) who speak to a need for change.

The ILCS Task Force Report details how adding CS courses is vital. Link

4. Rationale for addressing the need through a curricular change:

a) State the purpose of the change, indicating specifically how this curriculum change shall improve student learning by meeting the needs described in #3 above.

Adding this course to our curriculum gives students more opportunities and choice for computer science education. Students will develop skills to become more creative and powerful programmers.

b) If the committee considered other approaches to meeting the needs described above, describe those alternatives and indicate why each alternative was rejected.

Some students have been continuing their computer science education by requesting independent studies. It would be best for students to be able to work with classmates and have a dedicated teacher with a set curriculum.

c) Delineate the ways in which this curriculum proposal, if implemented, shall complement other courses in the department and the school.

Students who have taken AP Computer Science Principles and AP Computer Science A will find this a next logical step.

5. Description of proposed change:

a) Describe the students for which this curriculum change has been designed and the approximate size of the target group.

This course is designed for students who have completed AP Computer Science A before their senior year. At GBN, this would be an estimated 35-60 students annually who could qualify to take the course, but of those, we would *anticipate* 20-30 actually taking the course, due to scheduling issues, other interests, etc.

b) Provide a tentative outline of the proposed course or program.

Advanced Data Structures and Algorithms (ADSA) is a year-long course
ADSA focuses on fundamental algorithms and dynamic data structures, including linear lists, stacks, queues, trees, directed graphs, and other linked structures: arrays, strings, heaps, and hash tables.

Topics include

a. elementary methods of complexity analysis applied to algorithms that manipulate dynamic and static data structures
b. algorithms focused on sorting and searching methods.
c. Emphasis is placed on the appropriate choice and use of standard data structures.

See complete syllabus : here

6. Implications of the proposed change:

a) What are the implications of this proposed change for staffing, facilities, and budget?

There would likely be 1 or 2 sections at GBN, which will be held in the Math Computer Lab, room A200.

b) What are the implications of this proposed change for other courses in the department and for other departments in the school?

It would add another elective course in the area of Computer Science. It would give students the option to further explore a field that provides future career opportunities.

c) What additional resources in personnel and money shall be required before this change is implemented? Shall summer curriculum work be required?

The teachers will need appropriate training (perhaps one multi-day summer course) as well as some summer curriculum work.

7. Method of evaluating the success of the proposal after it is implemented:

a) If the proposal is approved and implemented, how shall it be evaluated?

If the students sign up for the course and enrollment stays consistent from year to year, we will know we have an interesting and successful course. We can also monitor college preparedness and the number of student pursuing pathways in CS at the collegiate level.

b) What specific outcomes shall indicate success of the implemented proposal?

1. Students will develop knowledge of basic data structures for storage and retrieval of ordered or unordered data. Data structures include: arrays, linked lists, binary trees, heaps, and hash tables.
2. Students will develop knowledge of applications of data structures including the ability to implement algorithms for the creation, insertion, deletion, searching, and sorting of each data structure.
3. Students will learn to analyze and compare algorithms for efficiency using Big-O notation.
4. Students will implement projects requiring the implementation of the above data structures.

APPLICATION FOR NEW CURRICULAR OFFERING

School: GBN **Department**: Science **Date**: October 2018

Name of proposed course: History and Philosophy of Science 161

1. Brief Description of New Curricular Offering:

The aim of this course is to provide a broad survey of some fundamental questions in philosophy of science, to develop explanations for phenomena based on historical theory and law, and to cultivate a student's ability to think through these difficult questions in a clear and critical way. We will concentrate questions such as, "What is a scientific explanation?" and "What is a law of nature?" We will look at and analyze both traditional and more recent attempts to answer such challenging questions. As a class we will investigate the "truthfulness" of science, ethical and moral decision making, and the impact technology has had on our decision-making processes.

This summer school course is a single semester course and will earn a student 0.5 science elective credits.

2. Curriculum Planning Committee Membership:

a. List the members of the committee:

Marcel Grdinic
Mary Rockrohr
Anthony Valsamis

b. Give the rationale for the members of this committee:

This course was developed by Marcel Grdinic, GBN Chemistry instructor. Marcel has worked closely with several teachers at GBN to develop summer enrichment courses for the Glenbrooks. Mr. Grdinic has consulted with Mary Rockrohr, the Instructional Supervisor, with regards to credit, prerequisites, and target audience. If approved, Mr. Grdinic will collaborate with peers to develop specific learning experiences for the course. Mr. Grdinic will utilize the modeling techniques to engage students in constructing their own explanations for scientific phenomena. In addition, Mr. Gridnic will tap into resources in the department to help develop specific learning experiences that center on a variety of sciences: biology, earth, chemistry and physics.

c. If outside experts are requested, give rationale for their inclusion, proposed revisions, and the curriculum vitae and fees.

n/a

3. Need for the new curricula:

a. Present and analyze data on student learning that point to a need for a new course.

The Science Department currently offers core science courses at the regular level during summer school. Biology 163 and Chemistry 163 do not offer enrichment opportunities for students.

The Next Generation Science Standards emphasize science and engineering practices which focus upon asking questions, defining problems, constructing explanations, designing solutions and engaging in argument from evidence. This course will exercise all of these science engineering practices as outlined by the NGSS in a unique learning environment.

b. Present other data (demographic, anecdotal, research, and others) that point to the need for a new course.

Dr. Mike Tarjan has indicated a desire to expand on the summer offerings in academic areas. He has emphasized the hope to offer enrichment courses to increase student interest in academic areas that students could not typically experience during the school year.

c. Summarize opinions of experts (researchers, higher educational professionals, business people, parents, community members) who speak to a need for the new course.

According to the *US News and World Report,* Science-related majors continue to drive undergraduate coursework as it connects directly to the current job market.

4. Rationale for addressing the need for the new course:

a. State the purpose of the new course, indicating specifically how this new course shall improve student learning by meeting the needs described in #3 above.

NGSS Standards encourage high schools to afford students the opportunity to engage in science and engineering practices in a variety of science disciplines. This course will provide a venue for students to exercise presentation, discussion and writing skills in conjunction with the science and engineering practices listed above.

b. If the committee considered other approaches to meeting the needs described above, describe those alternatives and indicate why each alternative was rejected.

Many of the engineering practices are infused in science courses; however, we do not offer a non-lab based course that approaches science in a way that this course is designed.

c. Delineate the ways in which this curriculum proposal, if implemented, shall complement other courses in the department and the school.

This course will be designed to engage those interested in scientific phenomena in logical sequence of thought and solution/explanation development. This skill is useful in any course in the building. In addition, this class may increase student interest in environmental issues, debate, and engineering courses.

5. Description of proposed course:

a. Describe the students for which this new curriculum has been designed and the approximate size of the target group.

We would expect to enroll enough students to support one section of a single semester summer school course. The course would be open to all grade and academic levels.

b. Tentative Outline of Proposed Course

Units of Study

1. What is Science?
2. Scientific reasoning
3. Explanations in science
4. Realism and anti-realism
5. Scientific change and scientific revolutions
6. Philosophical problems in physics, biology, and chemistry
7. Science and its critics

6. Implications of the proposed course:

a. What are the implications of this proposed course for staffing, facilities, and budget?

Because this course is proposed as a summer school course, enrollment will be based on the summer school formula. As a result, there is not a need for additional FTE.

This course will need access to the library during summer school hours.

b. What are the implications of this proposed change for other courses in the department and for other departments in the school?

This course, being a summer school course, will have limited effect on other courses.

c. What additional resources in personnel and money shall be required before this change is implemented? Shall summer curriculum work be required?

Minimal professional leave may be required to allow the curriculum designer to meet with area community colleges that offer a similar course or courses.

7. Method of evaluating the success of the proposal after it is implemented:

a. If the proposal is approved and implemented, how shall it be evaluated? What specific outcomes shall indicate success of the implemented proposal?

The success of the course will be evaluated in part by continued student interest in the elective. Students will be surveyed upon completion of the course to gather instructional and experiential feedback.

APPLICATION FOR NEW CURRICULAR OFFERING

School: GBN **Department**: Science **Date**: October 2018

Name of proposed course(s): Integrating Physics and Chemistry 163

1 . Brief Description of New Curricular Offering:

Integrating Physics and Chemistry is a hands-on course with the goal of preparing students to explore topics in both physics and chemistry. Throughout the course, the student will have the ability to investigate the science behind scientific theory in both physics and chemistry through a series of hands-on activities and projects. Problem solving is utilized to design methods of experimentation and prototype testing. In addition to laboratory experiences, students will engage in both individual and group projects. This is a year-long course and will earn 1.0 lab science credit.

2. Curriculum Planning Committee Membership:

a. List the members of the committee:

Anthony Dicristofano
Jeff Jordan
Brian Musolf
Mary Rockrohr

b. Give the rationale for the members of this committee:

Anthony Dicristofano is a recent graduate from the University of Illinois in Physics. His preservice education involved an in-depth study of the Next Generation Science Standards. He has taken great interest in incorporating the Science & Engineering Practices and Cross Cutting Concepts in to his teaching. This experience led him to design a projects-based science course at his previous school. His background will support the course creation with regards to content, experience and knowledge.

Jeff Jordan has taught the Applied Science & Technology and Physics Courses at GBN for over 20 years. He has a unique skill set in the sense that he is self-trained in the machining equipment that is available at GBN. His experience at GBN will ensure high expectations and will potentially afford students the opportunity to have access to machining equipment that they do not have available in the core chemistry and physics classes.

Bryan Musolf is in his second year at GBN teaching both Chemistry and Physics. His teaching background will help to make deliberate connections between chemistry and physics phenomena. In addition, he is knowledgeable of the comparative

ability levels of the sophomore and junior Chemistry and Physics 163 students. This will help to develop challenging, yet achievable, learning outcomes for the students.

Mary Rockrohr will be consulted on NGSS connections, curriculum design, credit, prerequisites and target audience.

c. If outside experts are requested, give rationale for their inclusion, proposed revisions, and the curriculum vitae and fees.

n/a

3. Need for the new curricula:

a. Present and analyze data on student learning that point to a need for a new course.

Several years ago, the GBN Science Department eliminated the first year regular and team level science course, Unified Science. This change provided all students equal access to biology, chemistry and physics, as appropriate, during the first three years at GBN. With this change, came the adoption of a new elective program for primarily 11th and 12th graders. After several years of implementation, we have identified a "hole" in our elective offerings. GBN offers several AP courses, life science electives (two semesters of Anatomy & Physiology, Brain Studies, and Plant Science), Earth & Space Science electives (Astronomy 163 & 173 and Earth Science 163), Forensic Science (a single semester general science), and Principles of Science and Applied Technology (Physics Science Elective offering 0.5 Science credit, 0.5 CTE credit).

The science graduation requirement in the State of Illinois is just 2 years of a lab science. GBN students take 3 or more years of science. Colleges and Universities like to see 3 years of lab science, and competitive schools prefer 4 or more years.

Integrating Physics and Chemistry would serve as a physical science course emphasizing chemistry and physics to complete the elective menu offered in the Science Department.

b. Present other data (demographic, anecdotal, research, and others) that point to the need for a new course.

Some students have a great interest in physics and/or chemistry and would like to enroll in a physical science elective that is not an AP course. Integrating Physics and Chemistry would fulfill this need at the regular 163 level.

c. Summarize opinions of experts (researchers, higher educational professionals, business people, parents, community members) who speak to a need for the new course.

n/a

4. Rationale for addressing the need for the new course:

a. State the purpose of the new course, indicating specifically how this new course shall improve student learning by meeting the needs described in #3 above.

Integrating Physics and Chemistry is designed to eliminate the student's need of possessing a substantial math background in order to enroll. In addition, the course will allow for a significant amount of student choice and student-driven inquiry. As a result, students can improve upon prototypes as they see fit according to their desire, needs, and abilities. The differentiation in this course will surface differently among the variety of students enrolled. In addition, it will serve as a third year lab science for those looking to further their education at a 4 year institution.

b. If the committee considered other approaches to meeting the needs described above, describe those alternatives and indicate why each alternative was rejected.

Some alternatives were investigated with regards to the course:

Engineering Physics was looked at, however, this course is aimed at the honors level student. In addition, the department felt this would interfere with the Honors PLTW sequence and would not meet the needs of our heterogeneous target audience.

A physical science course was looked at as well. However, this traditional science course does not serve as an enrichment course to core sciences. Traditionally, this class is taken in lieu of chemistry and physics. It is our hope that students will enroll in Integrating Physics and Chemistry due to an interest in the content, rather than a need.

c. Delineate the ways in which this curriculum proposal, if implemented, shall complement other courses in the department and the school.

The skills and background knowledge obtained in this course will support students as they enroll in any science or engineering course during their years at GBN. In addition, exposure to the physical sciences will support learning in both Physics and Chemistry courses. Ideally, this course will boost interest in engineering courses. Although the PLTW courses are honors level, it is a possibility that some students will enroll in PLTW as a result of their experiences in Integrating Physics and Chemistry. Finally, some of the topics and proposed projects may coordinate with area competitions that are typically accessible through the Science Club. This course may increase extracurricular involvement.

5. Description of proposed course:

a. Describe the students for which this new curriculum has been designed and the approximate size of the target group.

We would expect approximately 25 students to register for the course. The target audience are those students who are interested in physical science and hoping to take Integrating Physics and Chemistry as a first exposure course or a course to supplement their interest in the sciences.

This course would be open to students of all ability levels who have completed 1.0 credits in science.

b. Tentative Outline of Proposed Course:

Integrating Physics and Chemistry will engage students in an in-depth study of the following chemistry and physics theories and laws that are supported by the Next Generation Science Standards. In addition, the course will incorporate the skills-based aspects of the Next Generation Science Standards such as Science & Engineering Practices and Cross Cutting Concepts.

Topics of study include:

Thermodynamics
Kinetic Theory of Gases
Waves
Laws of Motion
Electricity & Electrical Forces
Coulomb's Law & Electrostatic Forces
Alternative Energy
Energy Transfer and Conservation of Energy

Science and Engineering Practices that will be emphasized throughout the semester include:

Developing & Using Models
Using Mathematical and Computational Thinking
Constructing Explanations & Designing Solutions
Obtaining, Evaluating and Communicating Evidence

6. Implications of the proposed course:

a . What are the implications of this proposed course for staffing, facilities, and budget?

Additional FTE will not be needed.
This course can be taught in either a physics or chemistry room, as space allows, and would need periodic access to the machining equipment available at GBN.

b. What are the implications of this proposed change for other courses in the department and for other departments in the school?

This course should better meet the needs of our students. The class may decrease the Earth Science 163 enrollment, however, many of the students who may find interest in this course would have already completed Earth Science GT. This course may also increase student interest in the area of engineering and promote courses in PLTW.

c. What additional resources in personnel and money shall be required before this change is implemented? Shall summer curriculum work be required?

Minimal professional leave may be required to allow the curriculum designers to meet with area high schools that offer a similar course or courses. In addition, the curriculum designers will want to collaborate with PLTW to ensure limited overlap and identify areas in which the two programs can support one another if such connection exists.

7. Method of evaluating the success of the proposal after it is implemented:

a. If the proposal is approved and implemented, how shall it be evaluated? What specific outcomes shall indicate success of the implemented proposal?

The course's success will be evaluated in part by continued student interest in the elective. Students will be surveyed upon completion of the course to gather instructional and experiential feedback.

APPLICATION FOR NEW CURRICULAR OFFERING

School: GBN **Department**: Science **Date:** October 2018

Name of proposed course(s): Organic Chemistry 161

1. Brief Description of New Curricular Offering:

This course is designed to give students the unique opportunity to delve into organic chemistry. The experience will support those who are interested in pursuing a career in areas related to biochemistry, chemical engineering and food sciences. Students will become familiar with the naming and structure of organic compounds. Experience with basic reactions of organic chemistry will be gained through laboratory work, group investigations, and class discussions.

This summer school course is a single semester course and will earn a student 0.5 lab science elective credits. Prerequisite: a first-year chemistry course

2. Curriculum Planning Committee Membership:

a. List the members of the committee:

Marcel Grdinic
Nana Ingram
Mary Rockrohr

b. Give the rationale for the members of this committee:

This course was developed by Marcel Grdinic, GBN Chemistry instructor. Marcel has worked closely with chemistry teachers at GBN to develop summer enrichment courses for the Glenbrooks. Mr. Grdinic has consulted with Mary Rockrohr, the Instructional Supervisor, with regards to credit, prerequisites, and target audience. In addition, he has collaborated with fellow chemistry teachers from a variety of courses to determine the scope and sequence for a summer organic chemistry course. If approved, Mr. Grdinic will collaborate with peers to develop specific learning experiences for the course. Mr. Grdinic currently works with Nana Ingram. Mr. Ingram serves as the Instructional Aid in the Introduction to Chemistry course. Mr. Ingram has an undergraduate degree in biology with an emphasis in chemistry. Mr. Ingram has experience as a teacher's assistant in an Organic Chemistry course at the collegiate level at Illinois Wesleyan. His background and wealth of experience will serve as an excellent resource for Mr. Grdinic.

a. If outside experts are requested, give rationale for their inclusion, proposed revisions, and the curriculum vitae and fees.

n/a

3. Need for the new curricula:

a. Present and analyze data on student learning that point to a need for a new course.

The Science Departments at GBN and GBS currently offer core science courses at the regular level during summer school. Biology 163 and Chemistry 163 do not offer enrichment opportunities for students.

b. Present other data (demographic, anecdotal, research, and others) that point to the need for a new course.

Dr. Mike Tarjan has indicated a desire to expand on the summer offerings in academic areas. He has emphasized the hope to offer enrichment courses to increase student interest in an academic areas that students could not typically experience during the school year.

c. Summarize opinions of experts (researchers, higher educational professionals, business people, parents, community members) who speak to a need for the new course.

n/a

4. Rationale for addressing the need for the new course:

a. State the purpose of the new course, indicating specifically how this new course shall improve student learning by meeting the needs described in #3 above.

Organic Chemistry will aim at increasing student interest in chemistry beyond traditional content and expose students to potential careers in bionuclear medicine, biochemistry, pharmacology, and food science.

This course supports the mission of the Next Generation Science Standards. The NGSS require students to make decisions that are rooted in scientific knowledge. In addition, according to the NGSS, high schools should engage students in a manner to gain an appreciation of how scientific and technological progress has affected fields of study, careers and job markets, and aspects of everyday life.

b. If the committee considered other approaches to meeting the needs described above, describe those alternatives and indicate why each alternative was rejected.

Organic chemistry is not considered core curricula for first year chemistry courses. Students in Chemistry 173 are exposed to the very basics of organic chemistry as time permits. This course would offer an in-depth look at organic chemistry which is a unique opportunity for high school students.

c. Delineate the ways in which this curriculum proposal, if implemented, shall complement other courses in the department and the school.

This course will serve as a second-year chemistry elective and will build off of students' prerequisite knowledge gained in Introduction to Chemistry, Chemistry 163 or Chemistry 173 courses. This class will also build off of basic biochemistry from freshman biology or will help support an upperclassman in junior year biology.

5. Description of proposed course:

a. Describe the students for which this new curriculum has been designed and the approximate size of the target group.

We would expect to enroll enough students to support one section of a single semester summer school course. The course will be developed for the regular-level and honors level (163 & 173) students. Introduction to Chemistry students are welcome but might find the content quite challenging. In addition, the course will be designed in conjunction with the skills outlined in the NGSS. Particular emphasis will be placed on the engineering practices and cross-cutting concepts. Therefore, students can expect a great deal of application through research and laboratory-based experiences. As a result, this course will be best suited for those with an interest in chemistry.

b. Tentative Outline of Proposed Course

Units of Study

1. Fundamentals of nomenclature and structure
2. The synthesis and analysis of organic compounds
3. Medicinal chemistry and pharmaceuticals
4. Pesticides
5. The chemistry of our senses
6. Polymers, plastics, and textiles
7. Nanochemistry

6. Implications of the proposed course:

a. What are the implications of this proposed course for staffing, facilities, and budget?

Because this course is proposed as a summer school course, enrollment will be based on the summer school formula. As a result, there is not a need for additional FTE. There will be a small financial obligation to stock the necessary laboratory equipment. Mr. Grdinic completed an innovation grant through the Glenbrook Foundation to help financially support this course. Other equipment and necessary chemicals are in stock at GBN and used in other chemistry courses.

b. What are the implications of this proposed change for other courses in the department and for other departments in the school?

This course, being a summer school course, will have limited effect on other courses. However, exposure may increase the desire to enroll in AP Chemistry or AP Biology during the school year.

c. What additional resources in personnel and money shall be required before this change is implemented? Shall summer curriculum work be required?

Minimal professional leave may be required to allow the curriculum designers to meet with area high schools and community colleges that offer an Organic Chemistry Course.

7. Method of evaluating the success of the proposal after it is implemented:

a. If the proposal is approved and implemented, how shall it be evaluated? What specific outcomes shall indicate success of the implemented proposal?

The course's success will be evaluated in part by continued student interest in the elective. Students will be surveyed upon completion of the course to gather instructional and experiential feedback.

To: Dr. Michael Riggle; Dr. Rosanne Williamson
From: Cameron Muir
Cc: Dr. Lauren Fagel
Re: New Course Proposals
Date: November 28, 2018

Recommendation

The Glenbrook South Administration recommends the following new course proposals and adoptions for approval. These recommendations are supported by the Glenbrook South Instructional Council, which met on September 12, 2018. *I am also attaching the new course proposal form for the one new course.*

Department	Course Title	Rationale	Impact on FTE, Budget, or Facilities	Evaluation
CTE & Special Education	Technology And Career Applications	Create a relevant and flexible technology course that allows for differentiation to deliver an instructional technology course which best meets the transition goals and interest areas of students with IEPs who require an instructional level of support. Focus on transferable life skills and employable skills by providing opportunity to generalize skills across settings.	None	Evaluations will take place through observations by administrators, such as the Instructional Supervisor of CTE and/or SPED and the Associate Principal of Curriculum and Instruction, through reflection of the instructors, and through anecdotal student feedback.

APPLICATION FOR CURRICULAR CHANGE

School: Glenbrook South **Department:** Career & Tech Ed and Special Education
Date: 10/16/18

Name of proposed curricular change: Technology & Career Applications

1. **Brief description of the curricular change:**
   Our purpose is to create a relevant and flexible technology applications course offered at the instructional level that allows for differentiation to address and build on current skill levels, as well as student interests. Content will focus on transferable life skills and employment skills by providing opportunity to generalize skills across settings.

2. **Curriculum Planning Committee Membership**

   a) List the members of the committee.
   Stacey Wolfe, Dawn Hall and Rob Fleming.

   b) Give the rationale for the membership of this committee.
   Instructional Supervisors for Career & Technical Education and Special Education coordinating efforts to update current curricular offerings and deliver an instructional technology course which best meets the transition goals and interest areas of students with IEPs who require an instructional level of support. Rob Fleming is contributing as a vocational specialist.

   c) If outside experts or consultants are requested, give rationale for their inclusion, proposed revisions, and the curriculum vitae and fees.
   The following work within the district and/or NSSED cooperative (no additional cost):

   - OT
   - AT
   - SLP
   - Social Work
   - Vocational specialist

3. **Need for the curricular change:**

   a) Present and analyze data on student learning that point to a need for change.

   or

   b) Present other data (demographic, anecdotal, research, and others) that point to a need for change.
   Students requiring an instructional level of support for elective courses were previously offered options based on adult decisions in scheduling. The instructional team has shifted to work closely with students, their families and

review the students' transition plans. The survey completed last winter indicated an interest in technology. Many students have goals in their transition plans to obtain vocational positions with a focus on technology or graphic design.

or

c) Summarize opinions of experts (researchers, higher educational professionals, business people, parents, community members) who speak to a need for change.

4. **Rationale for addressing the need through a curricular change:**

a) State the purpose of the change, indicating specifically how this curriculum change shall improve student learning by meeting the needs described in #3 above.

Students will connect interest and skills to related courses, club or activity, possible vocations as well as engaging in recreation/leisure activities (i.e. movie expert creating movie reviews; voracious reader writing a blog).

b) If the committee considered other approaches to meeting the needs described above, describe those alternatives and indicate why each alternative was rejected.

There are currently students enrolled in general education sections of CTE Technology based courses. The pacing of the classwork and specified nature of the course do not allow for the individualized approach with a transition focus.

c) Delineate the ways in which this curriculum proposal, if implemented, shall complement other courses in the department and the school.

Should students find an area of interest through this survey course, they may enroll in additional CTE courses to further their studies.

5. **Description of proposed change:**

a) Describe the students for which this curriculum change has been designed and the approximate size of the target group.

This course will be offered to students with IEPs who are in need of instructional level course instruction. These students are identified for Special Education services and may have a variety of disabilities (e.g. learning disabilities, cognitive impairments, other health impairments, emotional disabilities). The course would not exceed 13 students (this is the maximum enrollment for a Special Education course).

b) Provide a tentative outline of the proposed course or program.

- Keyboarding - typing proficiency and/or app access (text to speech, speech to text)

- Formatting and proficiency - letters, documents, sheets, resume
- Design principles - color, font, images; flyers, movie poster, advertisement, personal logo
- Search strategies - find credible information
- Basic programming, web design (splash page)? App development along with how to use?
- Electronic communication (email for purpose, etiquette, skype interviews, frequency of checking email)
- Digital citizenship
- Resume building - how to build skills/proficiencies to support vocational searching/interviewing
- Recreation/Leisure
- Self-Awareness and Self-Advocacy

6. **Implications of the proposed change:**

a) What are the implications of this proposed change for staffing, facilities, and budget?
This course would be assigned as .1 of a teacher's schedule. This is not an increase in staffing. The proposal is for this course to be co-taught (.1 general education, .1 special education)

b) What are the implications of this proposed change for other courses in the department and for other departments in the school?
We anticipate this course being offered as one in the rotation of instructional electives offered year to year.

c) What additional resources in personnel and money shall be required before this change is implemented? Shall summer curriculum work be required?

7. **Method of evaluating the success of the proposal after it is implemented:**

a) If the proposal is approved and implemented, how shall it be evaluated?
Evaluations will take place through observations by administrators, such as the Instructional Supervisor of CTE and/or SPED and the Associate Principal of Curriculum and Instruction, through reflection of the instructors, and through anecdotal student feedback.

b) What specific outcomes shall indicate success of the implemented proposal?

PROCEDURES FOR IMPLEMENTING BOARD POLICY: **CURRICULUM PLANNING STRATEGY** **7010**

Section A - Introduction

These procedures, outlined below, are intended to facilitate the systematic processing of curriculum development proposals for making modifications in the instructional program of District #225. The curriculum shall be defined to consist of all courses of study offered by the district.

Modifying the curriculum shall be defined as:

1. Adding or deleting a course, an entire sequence of courses, or a program.

2. Significantly changing the goals of an existing course or program.

Decisions concerning the administrative operation of the curriculum shall not be subject to the curriculum planning strategy. Decisions concerning such items as the following shall be made by the appropriate administrative staff:

1) assignment of the instructional staff,

2) development of the master class schedule,

3) assignment of students to classes,

4) recommendations concerning instructional materials, subject to the provisions of Policy 7180: Instructional Materials,

5) changes in course or program titles,

6) utilization of facilities,

7) classroom methodology or individual teaching strategies,

8) use of new instructional technologies.

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Section B - Procedures

1. Each instructional supervisor, in conjunction with the associate principal for instruction and the department staff, shall conduct an annual evaluation of approximately twenty percent (20%) of the department's courses and programs. It is the expectation that all courses within a department will be reviewed at least once during the five-year cycle. The courses and programs to be reviewed will be determined through a collaborative process involving the associate principals for instruction and instructional supervisors at both schools. This review will be used as a base for the Instructional Supervisor Curriculum Report.

2. The impetus for curriculum change may be such factors as, but not limited to, the following: a demonstrated need for learning outcomes not met by current curriculum; data on student learning; demographic data on students; professional expert advice from educational consultants or representatives of higher education; the conclusions of educational research. Upon seeing a curricular need, staff members, students, parents, and members of the community may submit ideas for curriculum changes to the instructional supervisor of the appropriate department. Principals also shall inform parents and members of the community about curricular issues and shall invite representatives to join curriculum planning committees when appropriate. Experts and consultants may be engaged to provide input to the process when deemed appropriately by the respective principals.

3. Upon receiving a suggested change in curriculum, the instructional supervisor may convene an ad hoc departmental curriculum planning committee to address the need for the curricular change. This curriculum planning committee, after studying the perceived need, may write a curriculum proposal. If the proposed change affects more than one department, the principal may convene an ad hoc interdisciplinary committee to address the perceived need.

4. The proposal of the departmental committee must include the need, the rationale, a description, and the implications of the curricular change, as well as a method of evaluating the success of the implemented proposal (Appendix B).

5. All proposals recommended by the departmental or interdisciplinary committees shall be reviewed by the building's instructional supervisors and principal. Accepted proposals shall be acted on successively by the principal, superintendent, and the Board.

   The decision or recommendation of each of the above-listed individuals or groups shall be communicated in writing to the committee submitting the proposal. A timeline for the strategy is contained in Appendix A of these Procedures.

6. No proposal shall be implemented unless approved by the principal, the superintendent, and the Board. The instructional supervisors shall serve in an advisory function.

7. Each year proposals shall be submitted to the Board for approval as indicated in the timeline in Appendix A of these Procedures. Under extraordinary circumstances, the superintendent may authorize the submission of a proposal to the curriculum planning process or to the Board at any time during the year.

8. One year after the implementation of a curriculum change, the instructional supervisor and the designated administrator shall evaluate each proposal approved by the Board in order to determine whether the proposal was successful in meeting its goals and fulfilling the educational needs. A report of this evaluation, together with a recommendation as to the continuance or modification of the implemented change, shall be shared with the appropriate committee that had proposed the curriculum change and shall be submitted to the superintendent and the Board no later than the end of the third semester that the course is offered.

APPENDIX A

CURRICULUM PLANNING STRATEGY ANNUAL TIMELINE *

Deadline	Activity
March 15 to August	Collaboration between instructional supervisors and principal or associate principal for instruction at both schools to review department curriculum in light of data on student learning and to consider curricular changes.
August to October	Instructional supervisors set up committees for suggested curricular changes. Committees meet, plan, elicit input from various constituencies, and write proposal applications.
By November 1	Curriculum planning committees submit applications for curriculum changes to the instructional supervisors.
By November 15	Instructional supervisors review proposals and submit recommendations to the principals.
By December 1	Principals accept or reject proposals and, if accepted, send them to the superintendent including any resource implications.
Prior to Winter Break	Superintendent accepts or rejects proposals and gives rationale for actions.
By February 1	Superintendent informs the Board of Education and submits accepted proposals for Board action.
By March 1	Instructional supervisors submit proposals for summer curriculum work to develop course outlines and instructional resources.

By March 15	Superintendent either approves the proposal for summer project and designates funding for summer curriculum project or rejects the proposal. Instructional Supervisor Curriculum Reports are due to the superintendent. These reports are based on curriculum review conducted or modifications made during the past year and identified curriculum directions for the ensuing year(s). The reports should also include an evaluation and recommendation for any course that has completed the third semester of implementation.

Note: Under extraordinary circumstances, the superintendent may authorize the submission of a proposal to the Board at any time during the year.

*** This timeline will be coordinated with but not limited by the district budget timeline process.**

APPENDIX B

APPLICATION FOR CURRICULAR CHANGE

School: Department: Date:

Name of proposed curricular change:

1. **Brief description** of the curricular change

2. **Curriculum Planning Committee Membership**

   a) List the members of the committee.

   b) Give the rationale for the membership of this committee.

   c) If outside experts or consultants are requested, give rationale for their inclusion, proposed revisions, and the curriculum vitae and fees.

3. **Need** for the curricular change:

   a) Present and analyze data on student learning that point to a need for change.

   or

   b) Present other data (demographic, anecdotal, research, and others) that point to a need for change.

   or

   c) Summarize opinions of experts (researchers, higher educational professionals, business people, parents, community members) who speak to a need for change.

4. **Rationale** for addressing the need through a curricular change:

   a) State the purpose of the change, indicating specifically how this curriculum change shall improve student learning by meeting the needs described in #3 above.

   b) If the committee considered other approaches to meeting the needs described above, describe those alternatives and indicate why each alternative was rejected.

   c) Delineate the ways in which this curriculum proposal, if implemented, shall complement other courses in the department and the school.

APPENDIX B (Continued)

APPLICATION FOR CURRICULAR CHANGE

5. **Description** of proposed change:

   a) Describe the students for which this curriculum change has been designed and the approximate size of the target group.

   b) Provide a tentative outline of the proposed course or program.

6. **Implications** of the proposed change:

   a) What are the implications of this proposed change for staffing, facilities, and budget?

   b) What are the implications of this proposed change for other courses in the department and for other departments in the school?

   c) What additional resources in personnel and money shall be required before this change is implemented? Shall summer curriculum work be required?

7. **Method of evaluating** the success of the proposal after it is implemented:

   a) If the proposal is approved and implemented, how shall it be evaluated?

   b) What specific outcomes shall indicate success of the implemented proposal?

Adopted: November 21, 1977
Revised: October 9, 1995
Revised: November 27, 2000
Revised: August 11, 2003