INSTRUCTION COUNCIL
MINUTES
November 7, 2014
204 Whitehurst


1. College Algebra Pilot Project – Chris Francisco

Dr. Francisco noted that in April 2014, the Schusterman Foundation approached the Mathematics Department, asking about ideas to reduce the need for students to take remedial math classes, and the Department suggested a possible College Algebra Pilot Project. National evidence suggests that remedial courses prove to be ineffective. The three year pilot is scheduled to begin Fall 2015. Dr. Francisco will need representatives to form a working group to discuss the implementation of the pilot. Dr. Francisco noted that he would like to conduct a similar pilot for math functions. Members endorse/support this initiative. Members noted that this endeavor would increase student workload and students participating in this program may not be able to take 15 hours. Members endorsed.

Background

• Students may qualify to take MATH 1513, College Algebra, at OSU by scoring at least 30/100 on the ALEKS math placement test.

• Those who need College Algebra but do not qualify prior to their freshman year either:
  o Take a remedial class at Northern Oklahoma College; however, qualifying for College Algebra in the spring will still require a score of 30/100 on ALEKS.
  o Wait at least until spring to take math at OSU, working through online ALEKS learning modules with help from the MLSC (still need 30/100 on ALEKS).
  o Take College Algebra elsewhere, often in a less rigorous form.

• Student success rates at OSU in College Algebra have risen dramatically recently:
  o Fall success rates increased from around 55% to 75%.
  o Spring success rates went from 45% to over 60%.

Existing problems

• A substantial number of students who would like to start in College Algebra in the fall of their freshman year do not qualify, even after several attempts at the placement test.

• Starting in a remedial math class is devastating for an Engineering student, who will be unable to graduate in four years and possibly not even in five because of math prerequisites for Engineering courses. It has similar impacts for other STEM students.

• Widespread anecdotal experience suggests that students from underserved areas and those coming from families with little formal education are particularly at risk.

• National evidence indicates that remedial math classes are ineffective at remedying students’ deficiencies.

Proposed project

Allow students with scores of 20-29 on the ALEKS placement test to enroll in College Algebra at OSU, but instead of their going to class only three hours per week, require them also to attend two hours per week of supplemental instruction. The Schusterman Family Foundation would like to fund the project, pending OSU approval and final negotiations.

• The ALEKS cutoff for remediation is 20, and thus students in this program are not deemed to require remedial math (despite being unprepared for College Algebra).
The supplemental instruction would be active learning sessions in groups of around 20, led by a trained advanced undergraduate and overseen by our College Algebra coordinator. The lessons would both help students understand prerequisite material and give extra practice on the concepts being covered in College Algebra.

Initially, we would target only the population taking College Algebra to evaluate the effectiveness of this strategy. We are seeking approval to hire a course coordinator for Math Functions, a class many non-STEM students take, and if this program is effective, we could expand it to students earning 20-24 on ALEKS who wish to take Functions.


Next Agenda.

3. Block Tuition Follow-Up Discussion - Pamela Fry

Dr. Fry noted that this discussion is related to Joe Weaver’s presentation on Block Tuition in the last meeting. Students are able to bank hours now but there will be no guarantee that the courses students need to take with the banked hours will be offered. Students need to know the status of their banked hours. Some members are concerned that no additional courses will be offered for students with banked hours.

4. General Education Task Force Recommendations – Pamela Fry

Dr. Fry asked members to take the General Education Task Force recommendations back to their areas and provide feedback on the recommendations in the next meeting.

Next Agenda.

5. Curricular Requests

College of Arts and Sciences

GEOSPATIAL INFORMATION SCIENCE, BS

New Program

The College of Arts and Sciences at Oklahoma State University proposes a new program in geospatial information science to address the rising demand for students with a theoretical and applied foundation in the rapidly growing field of Geospatial Information Science. Driven by technology innovations and an explosion in the availability of spatial information, geospatial technologies including geographic information systems (GIS), the Global Positioning System (GPS) and remote sensing, have introduced revolutionary ways to utilize spatial information.

Members Approved.

MICROBIOLOGY/CELL AND MOLECULAR BIOLOGY, BS (149)

Program Modification: Option Deletion, Option Name Change, and Program Requirement Change

Option Deletion: (1) Biomedical Science, (2) Microbial Ecology/Environmental Science, (3) Molecular Genetics, and (4) Microbial Pathogenesis.

Program Requirement Change: Course requirement changes.

The College of Arts and Sciences at Oklahoma State University requests the program changes to simplify advising and allow student flexibility in tailoring degree requirements to suit individual career goals. The change also will streamline the advising process.

Members approved.
ENGLISH, BA – (OFFERED IN TULSA) (482)
and
HISTORY, BA – (OFFERED IN TULSA) (483)

Program Deletions

The College of Arts and Sciences at Oklahoma State University requests deletion of the programs due to lack of funding. Members Approved.

CHEMISTRY, MINOR

Minor Modifications

Members Approved.

College of Education

COUNSELING, MS (194)

Program Modification: Option Name Change

Member Approved.

UNMANNED AIRCRAFT PILOT, NEW MINOR

New Minor

Members Approved.

College of Engineering, Architecture, and Technology

PETROLEUM ENGINEERING, MS

New Program

The College of Engineering, Architecture, and Technology at Oklahoma State University requests the new program to address an urgent need for engineers in the energy industry which has been transformed by horizontal drilling technology. Students will be prepared for successful careers in the oil and gas industry, governmental agencies, or other related fields. Students will learn advanced technical knowledge and engineering skills which graduates can use to improve the profitability, efficiency, safety, and environmental stewardship of companies which employ them. The program will provide students with the opportunity to perform independent research and to contribute to the development of new knowledge and technology for the petroleum industry. Members Approved.
HUMAN SCIENCES, MS (427)
Program Modification: Change of Program Name, Option Deletion, and Program Requirement Change

Change of Program Name: From: Human Sciences, MS To: Family Financial Planning, MS
Option Deletion: Family Financial Planning
Program Requirement Change: Course requirement changes and reduction of credit hours from 42 to 36.
The College of Human Sciences at Oklahoma State University requests the program name change and option deletion as it will be clearer and advantageous for graduates to have the Family Financial Planning title on transcripts. The program requirement changes provide a set of core courses (which address CFP exam requirements) that will be required of all students along with a set of electives that address valuable financial planning content.
Members Approved.

Graduate College

INTERNATIONAL DISASTER AND EMERGENCY MANAGEMENT, GRADUATE CERTIFICATE
New Program

The Graduate College at Oklahoma State University requests a new graduate certificate in International Disaster and Emergency Management. The new program will synergistically combine and build upon the existing strengths of the Fire and Emergency Management Administration (FEMA) program and the International Studies Program (INTL). The graduate certificate is designed to meet the demand for professional development in the area of International Disaster and Emergency Management. The program is unique by filling a critical need to provide training for professionals working internationally in this field.

Members tabled. The College of Agricultural Sciences and Natural Resources asked that AGCM 5503, Disaster Management and Communication in Agriculture and Natural Resources, be included in the curriculum for the proposed program. Dr. Jenswold will consult with the appropriate individuals to determine if this would be appropriate. Dr. Fry suggests that once a decision has been reached, the program proposal can be resent to members via email for a final vote.

6. Course Deactivation/Reactivation
   (Information Item Only)
   Reactivation:
   ETM 5221 – Engineering Teaming