GRADUATE COUNCIL MINUTES

670th Meeting October 3, 2022

MEMBERS PRESENT: Wilks, Arado, Barnes, Burchfield, Clark M., Crowley, Duffrin, Garver,

Glesner, Gordon, Hunt, Jaekel, Klonoski, Moghimi, Pitney, Qin, Scherer,

Shulman, Simonson, Swingley, Wasonga, Wu, and Yadav

MEMBERS ABSENT: Ahles. Mantzke, Saiyed, and Xia

OTHERS PRESENT: Barshinger (Secretary), Cox (Ombudsperson), McFarland-McKee

(Catalog Editor/Curriculum Coordinator), Matuszewich (Associate Dean

of CLAS), and Lindell (Administrative Assistant in International

Programs)

Dean Wilks called the Teams meeting to order at 10:02 a.m.

Approval of Minutes

Arado moved to approve the minutes from the September 12, 2022 meeting. Burchfield seconded. Motion carried. Minutes approved.

New Business

Curriculum Changes

Dean Wilks reported the curriculum changes in Mantzke's absence.

<u>College of Business</u>: Wilks summarized the curriculum changes proposed by the College of Business. Refer to the curriculum attachments for more information.

Wilks asked for a motion to approve the curriculum changes submitted from the College of Business. Gordon made the motion to approve and Crowley seconded. The Council approved these changes unanimously.

<u>College of Education</u>: Wilks summarized the curriculum changes proposed by the College of Education. Refer to the curriculum attachments for more information.

Wilks asked for a motion to approve the curriculum changes submitted from the College of Education. Hunt made the motion to approve and Pitney seconded. The Council approved these changes unanimously.

<u>College of Liberal Arts & Sciences</u>: Wilks summarized the curriculum changes proposed by the College of Liberal Arts and Sciences. Refer to the curriculum attachments for more information.

Wilks asked for a motion to approve the curriculum changes submitted from the College of Liberal Arts and Sciences second meeting. Scherer made the motion to approve and Wasonga seconded. The Council approved these changes unanimously.

Wilks asked for a motion to approve the curriculum changes submitted from the College of Liberal Arts and Sciences third meeting. Clark made the motion to approve and Swingley seconded. These changes were approved.

Wilks asked for a motion to approve the curriculum changes submitted from the College of Liberal Arts and Sciences fourth meeting. Wasonga made the motion to approve and Shulman seconded. These changes were approved unanimously.

Old Business:

Standards Committee Work and Review of Catalog Language

Dean Wilks has not had a chance to meet with the Standards Committee yet, but would like to receive feedback from the Council about catalog language that they would like to see changed. Especially from the student representatives that may have experienced barriers due to language in the catalog. No discussion was made.

Barnes reported that the School of Art and Design is reviewing their catalog program requirements and will be submitting updates. It seems their program language has not been updated for years.

Swingley pointed out that his department has issues with graduate students enrolling in undergraduate courses and was wondering how this can be flagged. He also mentioned that the degree progress report checks are manually tedious and would like to see this process go more electronically.

Jaekel shared items that will be reviewed and discussed in the Standards meetings this year. These items are the opt-in/opt-out GRE option, Duolingo, English proficiency requirements, good academic standing for SALs to be admitted into degree-seeking programs, IRB form, dean's designees, Pro-Quest vs. Huskie Commons, withdrawal policies, graduate academic calendar, academic probations and dismissals, and GA stipends. If a member has other issues that they would like Standards to discuss they can contact Dr. Jaekel.

Hunt would like the SAL procedures to be reviewed. Dean Wilks mentioned that she is the adviser for all SAL students currently. Hunt also requested the application fee for SALs and degree programs to be reviewed.

Klonoski pointed out that his faculty were not aware that in mixed undergraduate and graduate classes they are required to have separate syllabi outlining the requirements for each course. Currently it is hard to find the policy. There are issues with broken links from the old APPM and the policy didn't seem to transfer over into the Policy Library.

Announcements

- Wilks announced that it is homecoming week. Go out and enjoy the festivities.
- The next Graduate Council meeting will be in person with the option to attend remotely via Teams.

Adjournment:

Pitney made a motion to adjourn the meeting and Clark seconded. The meeting was adjourned at 11:13 a.m.

Agenda items for Curricular Changes for Inclusion to the Graduate Council Agenda for

October 03, 2022

I. COLLEGE MINUTE ITEMS – Section A

A. College of Business

CBUS 13 (AY 2021-2022)

• Item CBUSGR21.22.13.05 / NC OMIS 630

CBUS 01 (AY 2022-2023)

No Graduate Curricular Submissions

B. College of Education

CEDU 02 (AY 2022-2023)

• Item CEDU22.23.01.01 / OCC Master of Arts in Teaching, correcting minimum semester hours.

C. College of Engineering and Engineering Technology

No Curriculum Minutes or Submissions

D. College of Health and Human Sciences

CHHS 01 (AY 2022-2023)

No non-expeditable curricular items

E. College of Liberal Arts and Sciences

CLAS 01 (AY 2022-2023)

- Item CLAS22.23.01.02 / OCC Deletion of Specialization in Biology Teaching Program
- Item CLAS22.23.01.03 / OCC Adding Master of Arts, Philosophy to list of GRE Exempt Programs
- Item CLAS22.23.01.04/ OCC Textual changes from "adviser" to "advisor" M.S. in Biological Sciences and removal of specialization due to faculty retirement.

F. College of Visual and Performing Arts

CVPA 01 (AY 2022-2023)

• No Graduate Curricular Submissions

II. COLLEGE MINUTE ITEMS - EXPEDITED

A. College of Business

CBUS 13 (AY 2021-2022)

- CBUSGR21.22.13.01/CR MSDA 649
- CBUSGR21.22.13.02/CR MSDA 665X
- CBUSGR21.22.13.03/CR OMIS 665
- CBUSGR21.22.13.04/CR OMIS 670

CBUS 01 (AY 2022-2023)

• No Graduate Curricular Submissions

B. College of Education

• No expedited curricular items

C. College of Engineering and Engineering Technology

• No curriculum meeting minutes or submissions

D. College of Health and Human Sciences

CHHS 01 (AY 2022-2023)

• CHHS22.23.01.01 / CR NURS 743 clarification of repeatability

E. College of Liberal Arts and Sciences

CLAS 01 (AY 2022-2023)

• Item CLAS22.23.01.01 / CR BIOS 761

CLAS 02 (AY 2022-2023)

No expedited curricular items

F. College of Visual and Performing Arts

CVPA 01 (AY 2022-2023)

• No Graduate Curricular Submissions

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COLLEGE OF BUSINESS

DEPARTMENT OF OPERATIONS MANAGEMENT AND INFORMATION **SYSTEMS**

CIP: 11.01

New Course CBUSGR21.22.13.05

2022-2023 Online Graduate Catalog LINK Course Component: Lecture

OMIS 630 - Python Programming for Business Analytics Aimed at providing students with the skills necessary to use Python for data analysis in business. Course will start from general programming basics, data structures, and algorithm design with a heavy emphasis on applying data analysis and visualization techniques to solve real-world problems in business domains. Topics include data representation, manipulation and clearing, visualization, model development and evaluation with most up-to-date Python packages and popular toolkits.

Credits: 3

Rationale: This class has been offered since Fall 2014 as a special topics section of OMIS 694-Advanced Topics in Information Systems. As a graduate elective class, the proposed course has proven to be very attractive to our MIS graduate students with an average enrollment of 25 to 35 students every time this course is offered. Also based on the MIS exit survey feedback, students hope to see this class officially added to the MIS curriculum with a dedicated course title and number so that their programming skills can be reflected on their official transcripts.

Programming for data analytics is the fastest growing and one of the most in-demand skills in today's job market. Dedicated programming languages such as Python is easy to learn and can quickly build a moderate level of competence for our students. Aside from the financial benefits that the high demand for data analytics programming can provide to our graduates, the big data boom has also meant that there are all sorts of new opportunities cropping up for talented employees. This has resulted in less "computer programmer" job postings, but more opportunities that combine programming skills into other job titles. As such, understanding algorithms, data structures, and the core aspects of programming are vital parts of being a business analyst.

Learning how to code in Python offers NIU MIS graduates with career flexibility and makes them a more flexible candidate in a rapidly shifting digital economy. Given *Python's uses across many industries and applications – and its recent explosive use in* data science, machine learning and AI, Python is on a major growth trajectory. Going hand-in-hand with lightning speed of growth, Python programming is in high demand for jobs. Based on the number of job postings on one of the largest job search platforms, LinkedIn.com. Puthon ranks #2 in the most in-demand programming languages of 2022 (second only to JavaScript).

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In summary, Python programming is a rewarding skill that can benefit MIS students in their current roles and will certainly benefit them in future ones. Even if Python doesn't end up being their last programming language to learn, it should certainly be their first.

<u>Note on duplication</u>: An email from the Department of Computer Science indicates no significant overlap exists between the proposed OMIS 630 course and courses in the Department of Computer Science. Email is included below:

EMAIL RE: NONDUPLICATION OF NC OMIS 630

From: Nicholas Karonis < karonis@niu.edu > Sent: Tuesday, May 3, 2022 10:58 AM

To: Chang Liu < cliu@niu.edu >

Cc: Nicholas Karonis < karonis@niu.edu >

Subject: Fwd: New OMIS 630 for non-duplication check with CS

Dear Chang,

Thank you for sharing the OMIS 630 course proposal for our review and comment.

My department colleagues and I have reviewed the material and have concluded there are no significant overlaps between the proposed course and courses in the Computer Science Department curricula.

Please feel free to contact me if you have any questions or if I can otherwise be of assistance.

In the meantime, I wish you and your colleagues all the best through the remainder of the curricular review process. This looks to be an exciting and valuable addition to your curricula.

Sincerely, Nick

Begin forwarded message:

From: Chang Liu <cliu@niu.edu>

Subject: New OMIS 630 for non-duplication check with CS

Date: April 18, 2022 at 11:10:21 AM CDT **To:** Nicholas Karonis karonis@niu.edu>

Dear Nick:

Hope this email finds you well. I am attaching a new MIS course proposal of OMIS 630 Python Programming for Business Analytics for your non-duplication review. The course will be focused on the business side of programming, and I hope you will be okay for this.

Thank you so much, Nick. Will catch up with you soon.

Chang

Chang Liu, D.B.A.
Dean's Distinguished Professor and Department Chair
Operations Management & Information Systems (OM&IS)
College of Business
Northern Illinois University
DeKalb, IL 60115 815.753.3021

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COLLEGE OF EDUCATION

DEPARTMENT OF CURRICULUM AND INSTRUCTION

Other catalog change CEDU22.23.02.01 2022-2023 Online Graduate Catalog LINK

Master of Arts in Teaching

1

Requirements

The specialization in elementary education with initial licensure requires a minimum of 44-45 45-46 semester hours of graduate course work, consisting of the following:

<u>Rationale</u>: This change from "44-45" to "45-46" semester hours is to correct the text. EPS 504 is a 3-credit hour course and in the past, it was only 2-credit hours, so the catalog text needs to be updated to reflect this.

COLLEGE OF LIBERAL ARTS AND SCIENCES ALL UNIVERSITY SECTION

Other Catalog Change CLAS22.23.01.02 2022-23 Graduate Online Catalog LINK

The Graduate School

Graduate Programs

College of Liberal Arts and Sciences

School of Public and Global Affairs

Department of Anthropology Master of Arts (M.A.)

Department of Biological Sciences
Master of Science (M.S.)

with optional specializations in
Bioinformatics

Biology Teaching

Human Anatomical Sciences

Doctor of Philosophy (Ph.D.)

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Rationale: Deletion of the Specialization in Biology Teaching program.

Other Catalog Change CLAS22.23.01.03 2022-23 Graduate Online Catalog LINK

Admission to Graduate Study ↓ Examinations Required for Admission ↓ Graduate Record Examination (GRE)

Applicants to the following programs are exempt from the GRE:

- Accelerated B.S. Mechanical Engineering / M.S. Mechanical Engineering
- Master of Arts, English (exempt)
- Master of Arts, Philosophy (exempt)
- Master of Arts, Political Science (exempt)

Rationale: Many peer M.A. programs have made GRE scores optional for graduate admission. The Department of Philosophy has decided to follow this trend and therefore requests that its M.A. program be added to the list of GRE exemptions. For the past two years, the department's M.A. program has not required GRE scores due to the challenges posed by the pandemic. It now seeks to place that policy in the catalog, and it plans to implement the policy as soon as it is approved.

DEPARTMENT OF BIOLOGICAL SCIENCES

Other Catalog Change CLAS22.23.01.04 2022-23 Graduate Online Catalog LINK

Master of Science in Biological Sciences ↓ Requirements for Degree without a Specialization ↓ Thesis Option

The thesis option is intended primarily for students wishing to focus on certain areas of biology and for those considering further graduate education. Each student must enroll in BIOS 699, Master's Thesis, and submit a written thesis. A maximum of 18 and a minimum of 12 semester hours of combined credit in BIOS 699 and BIOS 770 may be applied toward the degree. The student's research adviser advisor will serve as chair of the

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graduate committee that will administer a final oral comprehensive examination including a defense of thesis.

↓ Specialization in Human Anatomical Sciences ↓

Thesis Option

Same as the non-thesis option except students are exempt from the Teaching Proficiency requirement, but must enroll in BIOS 699 and submit a written thesis. A maximum of 18 and a minimum of 12 semester hours of combined credit in BIOS 699 and BIOS 770 may be applied toward the degree. The student's research adviser advisor will serve as the chair of the graduate committee that will administer a final written and oral comprehensive examination covering course material and including a defense of thesis. A student who fails the examination may, with the permission of the department, repeat it once.

Specialization in Biology Teaching

A minimum of 36 semester hours is required for the M.S. degree with specialization in biology teaching. Students pursuing this specialization must have a B.S. degree in the natural sciences (biology, chemistry, earth and space science, or physics) and a current ISBE educator licensure (Type 09 licensure or a B.S. degree with a Type 03 licensure and a minimum of 32 semester hours of science content). The candidate must have one year or more of teaching experience in science.

The student will be required to take a proficiency examination in biology at the beginning and end of their program. In addition, the student will be required to conduct an approved action research project including submitting a written paper as well as present and defend the project (BIOS 770). The action research project will be developed under the supervision of the graduate adviser and conducted in a school setting with district approval.

Non-Thesis Option

Requirements

- BIOS 603 The Process and Practices of Science Credits: 3
- BIOS 605 Institute for Science Teachers in Biology Credits: 1-8
 Students must take this course for 3 semester hours.
- **BIOS 761 Seminar Credits: 1**
- BIOS 770 Independent Study Credits: 1-9
 Students must take this course for 4-6 semester hours.
- EPS 523 Application of Psychological Research to Educational Practice Credits: 3

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Biology Electives

Minimum of 9 semester hours of credit of graduate-level courses within the department.

Thesis Option

Same as the non-thesis option except students must enroll in BIOS 699 and submit a written thesis. A maximum of 18 and a minimum of 12 semester hours of combined credit in BIOS 699 and BIOS 770 may be applied toward the degree. The student's research adviser will serve as the chair of the graduate committee that will administer a final written and oral comprehensive examination covering course material and including a defense of thesis. A student who fails the examination may, with the permission of the department, repeat it once.

Rationale: 1) Updating the language to coordinate with the change from "adviser" to "advisor" throughout the catalogs; 2) Removing the specialization due to the lack of faculty mentor (after Jon Miller retired, no other faculty have a teacher licensure themselves to be a mentor); 3) If middle school or high school teachers want to get a master degree from our department, they still can do it through our non-thesis master program; 4) Removing this program will not affect our undergraduate Educator Licensure program (Educator Licensure, Secondary Science program (https://www.niu.edu/science-licensure/programs/biology.shtml) directed by Dr. Paul Fix). 5) Please inform the Grad School and ask that this page be removed from their website -- https://www.niu.edu/grad/academics/masters/biology-teaching.shtml describes the program and has Jon Miller as a contact.

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COLLEGE OF BUSINESS

DEPARTMENT OF OPERATIONS MANAGEMENT AND INFORMATION SYSTEMS

<u>Course revision</u> <u>CBUSGR21.22.13.01</u> 2022-2023 Online Graduate Catalog <u>LINK</u>

MSDA 649 - Data Analytics Programming

Introduces students to the fundamentals of data management and analysis using SAS and Python. Emphasis will be placed on the management of large distributed data sets and data manipulation, including reading, processing, recording, and reformatting of data. Topics of this course include: advanced programming, handling big data, performing complex mathematics, and optimizing SAS and Python programs. storing and manipulating data, and applying data science tools to conduct data analyses.

Credits: 3

<u>Rationale</u>: MSDA 649 has been revised to focus on Python programming. All SAS content has been removed. The change of the course description is necessary to reflect the changes made in the course contents.

<u>Course revision</u> <u>CBUSGR21.22.13.02</u> 2022-2023 Online Graduate Catalog <u>LINK</u>

MSDA 665X - Big Data Analytics for Business

Crosslisted as OMIS 665. In-depth study of the concepts, methods, and tools for Data Science and Big Data Analytics with the focus on business scenarios. Topics include the Data Analytics Lifecycle, Basic Data Analytics Methods using the open-source RStudio, Advanced Analytics Theories and Methods including Clustering, Association Rules, Linear and Logistic Regression, Classification and Time Series Analysis, and Advanced Analytics Technology and Tools including the open-source software MapReduce and Hadoop. Topics covered include data manipulation, visualization, modeling, and communicating results to stakeholders. Students will develop expertise in data analytics techniques (e.g., clustering, regression, etc.) using both RStudio and Apache Spark.

Prerequisites & Notes

CRQ: MSDA 645X or consent of department.

Credits: 3

<u>Rationale</u>: The change of the course description is necessary to reflect the changes in software packages.

<u>Course revision</u> <u>CBUSGR21.22.13.03</u> 2022-2023 Online Graduate Catalog <u>LINK</u>

SECTION E – Recorded for inclusion in the 2022-23 Graduate Catalog via the Expedited Curricular Process p. 2 of 3

OMIS 665 - Big Data Analytics for Business

Crosslisted as MSDA 665X. In-depth study of the concepts, methods, and tools for Data Science and Big Data Analytics with the focus on business scenarios. Topics include the Data Analytics Lifecycle, Basic Data Analytics Methods using the open-source RStudio, Advanced Analytics Theories and Methods including Clustering, Association Rules, Linear and Logistic Regression, Classification and Time Series Analysis, and Advanced Analytics Technology and Tools including the open-source software MapReduce and Hadoop. Topics covered include data manipulation, visualization, modeling, and communicating results to stakeholders. Students will develop expertise in data analytics techniques (e.g., clustering, regression, etc.) using both RStudio and Apache Spark.

Prerequisites & Notes

CRQ: OMIS 645 or consent of department.

Credits: 3

<u>Rationale</u>: The change of the course description is necessary to reflect the changes in software packages.

Course revision CBUSGR21.22.13.04 2022-2023 Online Graduate Catalog LINK

OMIS 670 - Social Media Analytics for Business

Designed to continue to build skills and knowledge about data analytics on consumer and enterprise social media platforms. Understanding of various analytical techniques to analyze data generated on consumer oriented social media platforms such as Twitter and Facebook as well as enterprise social media platforms such as Yammer and Chatter. Focus on understanding how businesses can leverage data to meet the objectives of their business functions such as information technology, marketing, and customer relationship management.

Credits: 3

<u>Rationale</u>: The change of the course description is necessary to reflect the changes in software packages.

COLLEGE OF HEALTH AND HUMAN SCIENCES

SCHOOL OF NURSING

Course Revision CHSS22.23.01.01 2022-2023 Graduate Catalog LINK

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NURS 743. DNP Project Practicum (2-3 per semester repeatable for up to 9 credit hours.) Practice experiences, practice hours and collaborative partnerships in a healthcare setting for purposes of assessing and planning the DNP Project and affording practice opportunities to apply, integrate and synthesize the DNP Essentials. DNP Project planning activities will focus on: Changes that impact healthcare outcomes with a systems or population focus, demonstrate practice implementation, a plan for real sustainability and evaluation, and a foundation for future practice scholarship.

RATIONALE: The additional verbiage is being added for clarity as well as to align with the wording on the course syllabus.

COLLEGE OF LIBERAL ARTS AND SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

Course Revision CLAS22.23.01.01 2022-23 Graduate Online Catalog LINK

Current Course Component: LEC Proposed Course Component: LEC (no change)

BIOS 761 - Seminar

M.S. and Ph.D. students are required to take a minimum of two and four semester hours, respectively. May be repeated to a maximum of 12 semester hours, but no more than 4 semester hours may be counted toward their the M.S. degree.

Credits: 1

Rationale: 1) The 4 credits of seminar to count for the PhD is not present in the description of BIOS PhD requirements. 2) More than 4 credits of seminar is not unreasonable in the 10 semesters (5 years) of a typical PhD. "Each student's program must consist of at least 90 semester hours of graduate credit." So even 12 credits doesn't seem like a disaster in the unlikely event a future student did that. They still would have to meet the requirement of "BIOS 799 - Doctoral Dissertation Credits: 1-12 (enrollment each semester after being admitted to candidacy, until all requirements for the degree are complete)" and the new "The Department of Biological Sciences research-tool requirement is fulfilled by completing two graduate-level courses totaling no fewer than six hours of credit and chosen by the student's doctoral committee." Approval: The revision and checklist items have been reviewed and approved by the CLAS Curricular Dean on September 8, 2022.