5 May 2022

TO: Faculty Senate

FROM: Sarah Read, Chair, Graduate Council

RE: June 2022 Consent Agenda

The following proposals have been approved by the Graduate Council and are recommended for approval by the Faculty Senate.

You may read the full text for any course or program proposal, as well as Budget Committee comments on program proposals, at the <u>Online Curriculum Management</u> System (OCMS) Curriculum Dashboard.

College of the Arts

New Courses

E.1.a.1

*Arch 512 Design/Build 1, 2 credits Student-led design workshop focused on the design and production of construction-ready project documentation for small projects. The workshop is organized in the manner of a small practice with students and professors working collaboratively. The workshop is structured around material investigations, constructional studies, client meetings, consultant meetings, and the fabrication of full-scale mock-ups as the means to understanding a fully realized project. Prerequisite: Permission of instructor.

E.1.a.2

*Arch 513 Design/Build 2, 4 credits Elective course exploring design/build methodologies through the construction of a full-scale project meant for public engagement. Students will work collectively on investigations into on-site decision making, handling deviations from construction documents, methods of construction, construction timelines and project management. This is the second part of a two-part design/build sequence that results in a hands-on, real-world project experience.

E.1.a.3

*Mus 535 Choral Literature II, 3 credits
 The objective of this course is to develop an understanding of the depth and breadth of choral music written from the Romantic Period to the Present Day. The course will examine representative literature from these eras, and will help each student to establish a more thorough knowledge of the repertoire, as they work towards diverse and innovative programming in their eventual choral conducting careers.

Change to Existing Course

E.1.a.4

 *Mus 534 Choral Literature, 3 credits – change title to Choral Literature I and change description

^{*} This course is part of a dual-level (400/500) course. For any revisions associated with the 400-level section please refer to the Undergraduate Curriculum Committee consent agenda memo.

School of Business

Changes to Existing Course

E.1.a.5

 BA 521 Leadership Development and Assessment, 2 credits – change title to Leadership Assessment and Development

College of Education

Change to Existing Program

E.1.a.6

 M.A./M.S. in Early Childhood: Inclusive Education – revision to core and to the Constructivism concentration

Changes to Existing Courses

E.1.a.7

 CI 518 Implementing Mathematics Reform, 3 credits – change title to Mathematics Teacher Leadership: Implementing Effective and Equitable Mathematics Teaching Practices, change description and prerequisite

E.1.a.8

 CI 519 Mathematics Leadership: Influencing and Facilitating Improvement, 3 credits – change title to Mathematics Teacher Leadership: Supporting Collegial Learning and School Improvement and change description

E.1.a.9

 CI 521 Practicum: Mathematics Leadership, 1-3 credits – change title to Mathematics Teacher Leadership: Responsive Mathematics Instruction and Assessment, change description, prerequisite, and grading option

E.1.a.10

*ECED 576 Equity and Cultural Diversity in Early Childhood Education, 3 credits – change course number to ECED 552, change title to Social Justice and Transformative Practice in Early Childhood Inclusive Education, change description, change credit hours to 4 credits, remove dual-level cross-listing

Maseeh College of Engineering and Computer Science

Change to Existing Program

E.1.a.11

• Graduate Certificate in New Product Development Management – change title to New Product Management

New Courses

E.1.a.12

*CS 563 Intro to Web Development, 3 credits
 Students will learn the fundamentals of web development, the structure and functionality of the web, and how to create responsive and accessible web applications using HTML, CSS, and JavaScript.

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• *CS 564 Front End Web Technologies, 3 credits
Students will learn the languages, libraries, and frameworks needed to build
user interfaces. This class will start with a review of HTML, CSS, and
JavaScript, before focusing on React and the React ecosystem. Students will
also work with CSS animations, gain experience with data visualization
libraries, and learn about design principles and design systems. The final
project is a dashboard application, which will leverage many of the topics
covered in class and give students the opportunity to create a data-driven
React application. Prerequisite: CS 563.

E.1.a.14

*CS 566 Voice Assistants, 3 credits
 Provides an introduction to voice technologies and how to design and build voice-enabled applications, by learning the concepts, techniques, and frameworks needed to build fully functional chatbots and virtual assistants. Students will explore the conversational design process and how to build effective voice user interfaces (VUIs) and conversational user interfaces (CUIs), and create voice-enabled applications and virtual assistants using popular APIs and platforms. Course assumes a working knowledge of JavaScript and Node.js or Python.

Changes to Existing Courses

E.1.a.15

• *CS 565 Full-stack Web Development, 3 credits – change title to Full Stack Web Development, change description and prerequisite

E.1.a.16

 ETM 511 Technology Management Writing and Presentations, 4 credits – remove cross-listing with ETM 611

E.1.a.17

 ETM 518 Ethical Issues in Technology Management, 4 credits – remove cross-listing with ETM 618

E.1.a.18

• ETM 519 Human Side of Technology Management, 4 credits – remove crosslisting with ETM 619

E.1.a.19

• ETM 520 Management of Engineering and Technology, 4 credits – remove cross-listing with ETM 620

E.1.a.20

 ETM 522 Communication and Team Building, 4 credits – remove cross-listing with ETM 622

E.1.a.21

• ETM 525 Strategic Planning, 4 credits – remove cross-listing with ETM 625

E.1.a.22

 ETM 526 Strategic Management of Technology, 4 credits – remove crosslisting with ETM 626

^{*} This course is part of a dual-level (400/500) course. For any revisions associated with the 400-level section please refer to the Undergraduate Curriculum Committee consent agenda memo.

 ETM 527 Competitive Strategies in Technology Management, 4 credits – remove cross-listing with ETM 627

E.1.a.24

• ETM 530 Decision Making, 4 credits – remove cross-listing with ETM 630

E.1.a.25

 ETM 531 Technology Assessment & Acquisition, 4 credits – remove crosslisting with ETM 631

E.1.a.26

 ETM 532 Technology Forecasting, 4 credits – remove cross-listing with ETM 632

E.1.a.27

• ETM 533 Technology Transfer, 4 credits – remove cross-listing with ETM 633

F.1.a.28

• ETM 534 Technology Roadmapping, 4 credits – remove cross-listing with ETM 634

E.1.a.29

 ETM 535 Advanced Engineering Economics, 4 credits – remove cross-listing with ETM 635

E.1.a.30

• ETM 536 RDM: R&D Management, 4 credits – remove cross-listing with ETM 636

E.1.a.31

 ETM 537 Benchmarking Using Data Envelopment Analysis, 4 credits – remove cross-listing with ETM 637

E.1.a.32

 ETM 538 Decision Support Systems: Data Warehousing, 4 credits – remove cross-listing with ETM 638

E.1.a.33

• ETM 540 Operations Research, 4 credits – remove cross-listing with ETM 640

E.1.a.34

 ETM 543 Front End Management for New Product Development, 4 credits – change title to New Product Planning and Trend Foresight and change description and remove cross-listing with ETM 643

E.1.a.35

 ETM 544 Organizational Project Management, 4 credits – remove cross-listing with ETM 644

E.1.a.36

• ETM 545 Project Management, 4 credits – remove cross-listing with ETM 645

E.1.a.37

 ETM 546 Project Management Tools, 4 credits – remove cross-listing with ETM 646

^{*} This course is part of a dual-level (400/500) course. For any revisions associated with the 400-level section please refer to the Undergraduate Curriculum Committee consent agenda memo.

• ETM 547 New Product Development, 4 credits – remove cross-listing with ETM 647

E.1.a.39

• ETM 548 Managing New Technology Introduction, 4 credits – remove cross-listing with ETM 648

E.1.a.40

 ETM 549 Management of Technology Innovation, 4 credits – remove crosslisting with ETM 649

E.1.a.41

• ETM 550 Manufacturing Systems Engineering, 4 credits – remove cross-listing with ETM 650

E.1.a.42

• ETM 551 Manufacturing Systems Management, 4 credits – remove crosslisting with ETM 651

E.1.a.43

 ETM 553 Manufacturing Systems Simulation, 4 credits – remove cross-listing with ETM 653

E.1.a.44

 ETM 555 Technology Marketing, 4 credits – remove cross-listing with ETM 655

E.1.a.45

 ETM 556 User-Centered Innovation, 4 credits – remove cross-listing with ETM 656

E.1.a.46

 ETM 559 Global Management of Technology, 4 credits – remove cross-listing with ETM 659

E.1.a.47

 ETM 560 Manufacturing Systems Engineering, 4 credits – remove crosslisting with ETM 660

E.1.a.48

• ETM 561 Manufacturing Systems Management, 4 credits – remove cross-listing with ETM 661

E.1.a.49

 ETM 562 New Venture Management, 4 credits – remove cross-listing with ETM 662

E.1.a.50

• ETM 563 Manufacturing Systems Simulation, 4 credits – remove cross-listing with ETM 663

E.1.a.51

 ETM 565 Technology Marketing, 4 credits – remove cross-listing with ETM 665

^{*} This course is part of a dual-level (400/500) course. For any revisions associated with the 400-level section please refer to the Undergraduate Curriculum Committee consent agenda memo.

• ETM 567 Knowledge Management, 4 credits – remove cross-listing with ETM 667

E.1.a.53

 ETM 568 Energy Technology Innovations, 4 credits – remove cross-listing with ETM 668

E.1.a.54

 ETM 570 Role of Government in Technology Management, 4 credits – remove cross-listing with ETM 670

E.1.a.55

 ETM 571 Managing Emerging Technologies, 4 credits – remove cross-listing with ETM 671

E.1.a.56

 ETM 573 Management of Intellectual Capital, 4 credits – remove cross-listing with ETM 673

E.1.a.57

 ETM 575 Science and Technology Policy, 4 credits – remove cross-listing with ETM 675

Drop Existing Courses

E.1.a.58

• ETM 611 Technology Management Writing and Presentations, 4 credits

E.1.a.59

• ETM 618 Ethical Issues in Technology Management, 4 credits

E.1.a.60

• ETM 619 Human Side of Technology Management, 4 credits

E.1.a.61

• ETM 620 Management of Engineering and Technology, 4 credits

E.1.a.62

ETM 622 Communication and Team Building, 4 credits

E.1.a.63

ETM 625 Strategic Planning, 4 credits

E.1.a.64

ETM 626 Strategic Management of Technology, 4 credits

E.1.a.65

• ETM 627 Competitive Strategies in Technology Management, 4 credits

E.1.a.66

ETM 630 Decision Making, 4 credits

E.1.a.67

• ETM 631 Technology Assessment & Acquisition, 4 credits

^{*} This course is part of a dual-level (400/500) course. For any revisions associated with the 400-level section please refer to the Undergraduate Curriculum Committee consent agenda memo.

• ETM 632 Technology Forecasting, 4 credits

E.1.a.69

ETM 633 Technology Transfer, 4 credits

E.1.a.70

ETM 634 Technology Roadmapping, 4 credits

E.1.a.71

ETM 635 Advanced Engineering Economics, 4 credits

E.1.a.72

• ETM 636 RDM: R&D Management, 4 credits

E.1.a.73

• ETM 637 Benchmarking Using Data Envelopment Analysis, 4 credits

E.1.a.74

• ETM 638 Decision Support Systems: Data Warehousing, 4 credits

E.1.a.75

• ETM 640 Operations Research, 4 credits

E.1.a.76

ETM 643 Front End Management for New Product Development, 4 credits

E.1.a.77

• ETM 644 Organizational Project Management, 4 credits

E.1.a.78

• ETM 645 Project Management, 4 credits

E.1.a.79

• ETM 646 Project Management Tools, 4 credits

E.1.a.80

• ETM 647 New Product Development, 4 credits

E.1.a.81

ETM 648 Managing New Technology Introduction, 4 credits

E.1.a.82

• ETM 649 Management of Technology Innovation, 4 credits

E.1.a.83

ETM 650 Manufacturing Systems Engineering, 4 credits

E.1.a.84

• ETM 651 Manufacturing Systems Management, 4 credits

E.1.a.85

ETM 653 Manufacturing Systems Simulation, 4 credits

E.1.a.86

ETM 655 Technology Marketing, 4 credits

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• ETM 656 User-Centered Innovation, 4 credits

E.1.a.88

ETM 659 Global Management of Technology, 4 credits

E.1.a.89

• ETM 660 Total Quality Management, 4 credits

E.1.a.90

• ETM 661 Technology Entrepreneurship, 4 credits

E.1.a.91

ETM 662 New Venture Management, 4 credits

E.1.a.92

ETM 663 Intrepreneurship in Technology, 4 credits

E.1.a.93

ETM 665 Research Methods for Engineering and Technology Management, 4 credits

E.1.a.94

• ETM 667 Knowledge Management, 4 credits

E.1.a.95

ETM 668 Energy Technology Innovations, 4 credits

E.1.a.96

• ETM 670 Energy Technology Innovations, 4 credits

E.1.a.97

• ETM 671 Managing Emerging Technologies, 4 credits

E.1.a.98

ETM 673 Management of Intellectual Capital, 4 credits

E.1.a.99

ETM 675 Science and Technology Policy, 4 credits

College of Liberal Arts and Sciences

New Courses

E.1.a.100

*Bi 578 Terrestrial Community Ecology, 3 credits
 Study of how plant, animal, and microbial communities are assembled across time and space. Emphasis will include understanding interactions among species and the causes of biological diversity in terrestrial systems.

 Prerequisite: Graduate standing or Bi 357.

E.1.a.101

*G 557 Frontiers in Planetary Science, 4 credits
 Areas of active research in the planetary sciences on topics that have not yet made it into the Textbooks will be explored. Three main themes will be covered: 1) the formation of planetary systems, 2) the accretion and differentiation of planets, and 3) the geologic and atmospheric evolution of

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planets. As appropriate for these themes, content will range widely, including aspects of astronomy, geology, and climate.

E.1.a.102

• Mth 696 Mathematical Knowledge for Teaching & Educational Research Grades K-16, 3 credits Explore and develop mathematical knowledge for teaching and educational research related to the K-16 grade band. Expected preparation is a bachelors degree in mathematics or equivalent. The goal will be to build on students' core mathematical knowledge in ways that will support them in classroom teaching and in conducting research on the teaching and learning of mathematics. Expected preparation: Equivalent of an undergraduate degree in mathematics. This course may be repeated up to three times for credit.

E.1.a.103

Mth 697 Advanced Mathematics for Teaching & Educational Research, 3 credits

Develop knowledge of advanced mathematics for teaching and educational research. Expected preparation is a bachelors degree in mathematics or equivalent. The goal is to build on students' knowledge of advanced mathematics (from pure mathematics course work) in ways that will support them in undergraduate classroom teaching and in conducting research on the teaching and learning of undergraduate mathematics. Further, the course supports students in making connections between K-16 mathematics and advanced (graduate level) mathematics. Expected preparation: Equivalent of an undergraduate degree in mathematics. This course may be repeated up to three times for credit.

E.1.a.104

*NAS 522 First Foods of the Pacific Northwest, 4 credits Using examples from the Pacific NW, this course will investigate the interconnected social, cultural, and political relationships between Indigenous food systems, spirituality, kinship, food sovereignty, and ecology; from subsistence food traditions to government commodity foods to urban Native American food movements. We will contemplate and learn about Traditional Ecological Cultural Knowledge (TECK) and the impact of colonization on Indigenous food systems and landscapes from a place based lens.

E.1.a.105

Psy 511 Advanced Community Psychology, 4 credits
 Theory, methods, practice, and selected topics in advanced community psychology. Also offered as Psy 611 and may be taken only once for credit.

E.1.a.106

Psy 611 Advanced Community Psychology, 4 credits
 Theory, methods, practice, and selected topics in advanced community psychology. Also offered as Psy 511 and may be taken only once for credit.

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Changes to Existing Course

E.1.a.107

• WS 571 Transnational Feminisms, 4 credits – change title back to Global Feminisms and change description

Drop Existing Courses

E.1.a.108

*Phl 581 Biomedical Ethics, 4 credits

E.1.a.109

• *PhI 582 Biomedical Ethics, 4 credits

E.1.a.110

*Phl 583 Biomedical Ethics, 4 credits

School of Social Work

Change to Existing Program

E.1.a.111

M.S.W. in Social Work – remove core course and revise concentrations

Changes to Existing Courses

E.1.a.112

• SW 532 Advocacy and Empowerment, 3 credits – change prerequisite

E.1.a.113

 *SW 547 Social Work and Sustainability, 3 credits – change title to Social Work and Environmental Justice, change description and prerequisite, and remove from dual-level cross-listing

Drop Existing Courses

E.1.a.114

*CFS 550 Youth and Youth Work, 4 credits

E.1.a.115

• SW 517 Health Across the Lifespan I, 3 credits

E.1.a.116

SW 518 Health Across the Lifespan II, 3 credits

E.1.a.117

• SW 519 Health Across the Lifespan III, 3 credits

E.1.a.118

SW 545 Advanced Human Behavior in the Social Environment, 3 credits

E.1.a.119

• SW 586 Children, Youth and Families I, 3 credits

E.1.a.120

SW 587 Children, Youth, and Families II, 3 credits

E.1.a.121

• SW 588 Children, Youth, and Families III, 3 credits

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• SW 645 Advanced Human Behavior in the Social Environment, 3 credits

University Library

New Course

E.1.a.123

 Ulib 511 Library Research & Scholarly Communication Fundamentals, 1 credit Introduces graduate students to practical skills and resources related to research; such as, searching for literature review sources, data management basics, and citation management. We will also explore the dissemination of scholarship and the publishing landscape. Students are encouraged to utilize weekly activities and their final project to support their research and other scholarship. This course is recommended for graduate students working on a thesis, dissertation, or other large research project.

College of Urban and Public Affairs

Change to Existing Program

E.1.a.124

 Master of Public Policy – revise core and methods requirements and reduce minimum credits from 60 credits to 54 credits

New Course

E.1.a.125

PS 533 Ethics and Public Policy, 4 credits
 An examination of the normative dimensions of public policy, focusing both
 on the ethical issues raised by the means of policymaking as well as the
 values that might shape the ends of public policy. This is the same course as
 PAP 513 and may be taken only once for credit.

Changes to Existing Courses

E.1.a.126

PA 554 Policy Analysis Research, 3 credits – add cross-listing with PAP 654

E.1.a.127

 *PAP 513 Ethics and Public Policy, 4 credits – change course number to PAP 533 remove dual-level cross-listing with PAP 413, and add cross-listing with PS 533

E.1.a.128

 PAP 654 Policy Analysis Research, 3 credits – add cross-listing with PA 554 and change description

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