9-1-2016

Curriculum Subcommittee Agenda, September 1, 2016

Utah State University

Curriculum Subcommittee Agenda
1 September 2016

A meeting of the Curriculum Subcommittee of the Educational Policies Committee will be held on 1 September 2016 at 2:00 pm in Old Main 136 (Champ Hall Conference Room).

1. *Approval of 7 April 2016 Minutes*
   https://usu.box.com/s/0izkkz2mk30nnbnjtzsiuxmk5g4zf5z2

2. *Semester Course Approval Reviews*
   https://usu.curriculog.com/

   College of Agriculture and Applied Sciences
   ADVS = 5
   APEC =
   ASTE = 74
   LAEP =
   NDFS = 1
   PSC = 4

   Caine College of the Arts
   ART =
   MUSC =
   THEA =

   Jon M. Huntsman School of Business
   ACCT =
   BUS =
   ECN =
   MGT = 3
   MIS = 7

   Emma Eccles Jones College of Education and Human Services
   COMD =
   EDUC =
   FCHD =
   HPER =
   ITLS =
   NURS =
   PSY =
   SPED = 2
   TEAL = 1

   College of Engineering
   BENG =
   CEE = 1
   CS =
   ECE =
   EED =
   MAE =

College of Humanities and Social Sciences
ENGL =
HIST = 3
JCOM =
LPCS = 3
POLS = 4
SSWA = 2

S.J. & Jessie E. Quinney College of Natural Resources
ENVS = 1
WATS =
WILD = 7

College of Science
BIOL = 4
CHEM = 1
GEOL =
MATH = 6
PHYS = 8

USU =

1. ADVS - 5000 - One Health: People, Animals, and the Environment
2. ADVS - 5400 - Environmental Toxicology
3. ADVS - 6400 - Environmental Toxicology
4. AG - ADVS - 2300
5. AG - AUTO - 0010
6. AG - AUTO - 0020
7. AG - AUTO - 0021
8. AG - AUTO - 0030
9. AG - AUTO - 0031
10. AG - AUTO - 0035
11. AG - AUTO - 0040
12. AG - AUTO - 0045
13. AG - AUTO - 0050

14. AG - AV - 2000
15. AG - AV - 2355
16. AG - AV - 2510
17. AG - AV - 2520
18. AG - AV - 2545
19. AG - AV - 3010
20. AG - AV - 3120
21. AG - AV - 3140
22. AG - AV - 3410
23. AG - AV - 3610
24. AG - AV - 3720
25. AG - AV - 3740
26. AG - AV - 4280
27. AG - AV - 4300
28. AG - AV - 4480
29. AG - AV - 4490
30. AG - AV - 4505
31. AG - AV - 4605
32. AG - AV - 4610
33. AG - AV - 4620
34. AG - AV - 4660
35. AG - AV - 4705
36. AG - AV - 4720
37. AG - AV - 5400
38. AG - AV - 5420
39. AG - AV - 5500

40. AG - BCCM - 0100
41. AG - BCCM - 0200
42. AG - BCCM - 0300
43. AG - BCCM - 0310
44. AG - BCCM - 0400
45. AG - BCCM - 0410
46. AG - BCCM - 0500
47. AG - BCCM - 0510
48. AG - BCCM - 0520
49. AG - BCCM - 0530
50. AG - BCIS - 0020
51. AG - BCIS - 0030
52. AG - BCIS - 0040
53. AG - BCIS - 0050
54. AG - BCIS - 0060
55. AG - BCIS - 0070
56. AG - BCIS - 0080
57. AG - BCIS - 0081
58. AG - BCIS - 0090
59. AG - BUSN - 0300
60. AG - BUSN - 0310
61. AG - BUSN - 0320
62. AG - BUSN - 0340
63. AG - CEAD - 5700

64. AG - CEAS - 1000

65. AG - CEAS - 5700

66. AG - EDDT - 0010

67. AG - HEAL - 0100

68. AG - HEAL - 0105

69. AG - HEAL - 0110

70. AG - MINT - 0150

71. AG - NDFS - 5320

72. AG - WDEV - 0505

73. AG - WELD - 0301

74. AG - WELD - 0302

75. BIOL - 5400 - Environmental Toxicology

76. BIOL - 6400 - Environmental Toxicology

77. CHEM - 5070 - Biophysical Chemistry

78. COST - 1100 - Cosmetology Theory I

79. COST - 1110 - Cosmetology Lab I

80. COST - 1200 - Cosmetology Theory II

81. COST - 1210 - Cosmetology Lab II

82. COST - 2300 - Intermediate Cosmetology Theory I

83. COST - 2310 - Intermediate Cosmetology Lab I

84. EN - CEE - 2620

85. HS - CEHI - 5700

86. HS - CELP - 5700

87. HS - CEPO - 5700

88. HS - CLAS - 1120
89. HS - CMST - 3160
90. HS - CMST - 3600
91. HS - POLS - 6220
92. HS - POLS - 6250
93. HS - POLS - 6260
94. HS - RELS - 3420
95. HS - SOC - 2650
96. HS - SOC - 6270
97. MGT - 3590 - Small Business Consulting
98. MGT - 3875 - Strategic Advertising Campaigns
99. MGT - 6000 - Business Fundamentals
100. MIS - 4330 - Advanced Database and Database Analytics
101. MIS - 5400 - Systems and Analytics Programming
102. MIS - 6230 - Management of Database Systems
103. MIS - 6330 - Advanced Database Implementation
104. MIS - 6500 - Data Mining
105. MIS - 6610 - MIS Strategy for IT Professionals
106. MIS - 6800 - Advanced Topics in Information Security
107. NR - CEEN - 5700
108. NR - CEWI - 5700
109. NR - WILD - 2400
110. NR - WILD - 3810
111. NR - WILD - 4750

112. NR - WILD - 5450

113. NR - WILD - 5460

114. NR - WILD - 7200

115. PHYS - 2200 - Elements of Mechanics

116. PHYS - 2215 - Physics for Scientists and Engineers Lab I

117. PHYS - 2220 - Physics for Scientists and Engineers II (BPS/QI)

118. PHYS - 2225 - Physics for Scientists and Engineers Lab II

119. PHYS - 2500 - Introduction to Computer Methods in Physics

120. PHYS - 2710 - Introductory Modern Physics

121. PHYS - 3710 - Intermediate Modern Physics

122. PHYS - 4010 - Chaos Under Control (DSC/QI)

123. PSC - 4830 - Atmospheric Instrumentation and Operation

124. PSC - 4840 - Climate Dynamics

125. PSC - 4850 - Physics of Climate

126. PSC - 4860 - Atmospheric Thermodynamics

127. PUBH - 5400 - Environmental Toxicology

128. PUBH - 6400 - Environmental Toxicology

129. SC - MATH - 0995

130. SC - MATH - 1050

131. SC - MATH - 1060

132. SC - MATH - 1210

133. SC - STAT - 1040

134. SC - STAT - 1045

135. SPED - 7040 - Literature Review

136. SPED - 7060 - Research Internship

137. TEAL - 6235 - Instructional Implications of Literacy Development

3. ***Program Proposals***
   Request from the Department of Applied Economics in the College of Agriculture and Applied Sciences to change the name from Agricultural Economics to Applied Economics.
   https://usu.box.com/s/b1ahye7t3ypcmzgqjk0ua4oz6y1wg8yj

   Request from the Department of Plants, Soils and Climate in the College of Agriculture and Applied Sciences to offer a Minor in Residential Landscape Design.
   https://usu.box.com/s/epr9h7m9cw6xv3q6vy3i71kgh7y8reav

   Request from the Department of Wildland Resources in the S.J. & Jessie E. Quinney College of Natural Resources to add a Forest Ecology Specialization to the MS and PhD programs.
   https://usu.box.com/s/7ckwj2lg3v7r0shxlb9bps6ibmrlezlm

4. ***Other Business***
   Approving Prerequisites – John Mortensen

   The example below shows the MATH 1210 prerequisite, which includes several ways a prerequisite can be satisfied. By contrast, CEE 2240 has a similar prerequisite, but not all options are listed (e.g., SAT Math score of 620; AP Calculus AB score of 3, etc.).

   MATH 1210 Prerequisite
   One of the following within the last year or three consecutive semesters (including summer); ACT Math score of at least 27; SAT Math score of at least 620; AP Calculus AB score of at least 3; Grade of C- or better in MATH 1050 and MATH 1060; or satisfactory score on the Math Placement Exam.

   CEE 2240 Prerequisite **(My suggested additions are in red)**
   ACT Math score of 27 or higher; SAT Math score of 620 or higher; AP Calculus AB score of 3 or higher; AP Calculus BC score of 3 or higher; or credit for MATH 1050 and MATH 1060. Enrollment limited to students having majors within the College of Engineering.

   Curriculog updates and site changes.

CURRICULUM SUBCOMMITTEE MINUTES
7 April 2016

A meeting of the Curriculum Subcommittee of the Educational Policies Committee was held on 7 April 2016 at 2:00 pm in Old Main 136 (Champ Hall Conference Room).

Present: Ed Reeve, Chair, College of Agriculture and Applied Sciences
Larry Smith, Chair, EPC
Michele Hillard, Secretary
Erin Brewer, Graduate Council
Richard Mueller, College of Science
Mike Lyons, College of Humanities and Social Sciences
Karen Mock, S.J. & Jessie E. Quinney College of Natural Resources
Jessica Hansen, Academic and Instructional Services
Kacy Lundstrom, Libraries
Dean Adams, College of Engineering
Scott Henrie, USU-Eastern
Roland Squire, Registrar's Office
Scott Hunsaker, Emma Eccles Jones College of Education and Human Services
Nathan Straight, Regional Campuses
Heidi Kesler for Marci Smith, Registrar's Office
Nicholas Morrison, Caine College of the Arts
Vijay Kannan, Jon M. Huntsman School of Business

Absent: Scott Bates, Chair, Academic Standards
Ty Aller, Graduate Studies Senator
Janet Anderson, Office of the Provost

Visitors: Ashley Waddoups, USU Studentbody President Elect
Jeannie Thomas, Department Head, English
Paul Johnson, Department Head, Plants, Soils and Climate
Dennis Dolny, Department Head, Health, Physical Education and Recreation

1. *Approval of 3 March 2016*
   https://usu.box.com/s/cwjtcc8ay50a6opdsej23gvyyren4tey
   Motion to approve the 3 March 2016 minutes made by Dean Adams. Seconded by Dick Mueller. Minutes approved

2. *Semester Course Approval Reviews*
   https://usu.curriculog.com/

   College of Agriculture and Applied Sciences
   Motion to approve the business of the College of Agriculture and Applied Sciences made by Dean Adams. Seconded by Vijay Kannan. Amendment to make changes (listed below) made by Mike Lyons. Seconded by Vijay Kannan. Business approved with changes.
   ADVS = 2 (ADVS 6500 rejected needs a different course description)
   APEC = 4
   ASTE = 20 (AV 2501-2505 Needs different course titles)
   (AV 5500 needs to have the work students-not student)

(AV 6130 crewmember should be two words)
LAEP = 4
NDFS = 6
PSC =

Caine College of the Arts
Motion to approve the business of the Caine College of the Arts made by Nick Morrison. Seconded by Vijay Kannan. Business approved.
ART =
MUSC = 1
THEA =

Jon M. Huntsman School of Business
ACCT =
BUS =
ECN =
MGT =
MIS =

Emma Eccles Jones College of Education and Human Services
Motion to approve the business of the Emma Eccles Jones College of Education and Human Services made by Scott Hunsaker. Seconded by Dick Mueller. Business approved.
COMD =
EDUC =
FCHD = 8
HPER = 1
ITLS =
NURS =
PSY = 2
SPED =
TEAL = 2

College of Engineering
Motion to approve the business of the College of Engineering made by Dean Adams. Seconded by Dick Mueller. Business approved.
BENG = 5
CEE =
CS = 3 (CS 2810 rejected at the request of Dean Adams)
ECE = 4
EED =
MAE = 2

College of Humanities and Social Sciences
Motion to approve the business of the College of Humanities and Social Sciences made by Mike Lyons. Seconded by Kacy Lundstrom. Business approved.
ENGL = 6
HIST = 4
JCOM = 7
LPCS = 5

POLS = 1
SSWA =

S.J. & Jessie E. Quinney College of Natural Resources
Motion to approve the business of the S.J. & Jessie E. Quinney College of Natural Resources made by Karen Mock. Seconded by Dick Mueller. Business approved.
ENVS = 4 (ENVS 2220 rejected)
(ENVS 4920 course description needs to include department approval)
WATS = 4(WATS 5640 justification should read NR 2220 will be changed to WATS 2220 in Spring 2017)
WILD = 8

College of Science
Motion to approve the business of the College of Science made by Dick Mueller. Seconded by Dean Adams. Business approved.
BIOL = 6
CHEM =
GEOL = 4
MATH =
PHYS =

USU =

1. ADVS - 5500 - Applied Animal Nutrition
2. ADVS - 6500 - Applied Animal Nutrition
3. APEC - 1600 - Natural Resources and American Economic Institutions
4. APEC - 4900 - Directed Readings, Research, or Seminar Series
5. APEC - 6910 - Independent Research
6. ASTE - 3100 - Personal and Team Leadership
7. AV - 1130 - Principles of Flight
8. AV - 2160 - Aircraft Systems for the Professional Pilot
9. AV - 2410 - Commercial Stage I Flight
10. AV - 2500 - Flight Experience
11. AV - 2501 - AV 2501 Flight Experience
12. AV - 2502 - Flight Experience
13. AV - 2503 - Flight Experience
14. AV - 2504 - Flight Experiene
15. AV - 2505 - Flight Experience

16. AV - 4710 - Crew Resource Management
17. AV - 5500 - Airline Transport Pilot (ATP) Ground School
18. AV - 6110 - Air Transportation
19. AV - 6130 - Aerospace Technology and Automation
20. AV - 6140 - Aviation Safety: History and Research
21. AV - 6330 - Flight Safety Program Management
22. AV - 6340 - Aircraft Accident Investigation and Analysis
23. AV - 6350 - Aviation Security
24. AV - 6900 - Aviation Independent Study
25. AV - 6930 - Aviation Special Topics
26. BENG - 4880 - Biological Engineering Design II
27. BENG - 6860 - Research Orientation and Planning
28. BENG - 6870 - Research Planning
29. BENG - 7860 - Research Orientation and Planning
30. BENG - 7870 - Research Planning
31. BIOL - 1610 - Biology I
32. BIOL - 1615 - Biology I Laboratory
33. BIOL - 1620 - Biology II (BLS)
34. BIOL - 1625 - Biology II Laboratory
35. BIOL - 4060 - Exploring Animal Behavior (CI)
36. BIOL - 5250 - Evolutionary Biology (CI)
37. CS - 2810 - Computer Systems Organization and Architecture
38. CS - 6675 - Advanced Data Science and Mining
39. CS - 7675 - Advanced Data Science and Mining
40. ECE - 5760 - Hardware and Embedded Systems Security

41. ECE - 6340 - Spacecraft Attitude Control Theory
42. ECE - 6345 - Spacecraft Attitude Control Applications
43. ECE - 6760 - Hardware and Embedded Systems Security
44. ENGL - 3710 - TOPICS IN FOLKLORE
45. ENGL - 4220 - Teaching Literacy in Diverse Classrooms
46. ENGL - 4340 - Studies in Prose
47. ENGL - 4530 - English Clinical Experience
48. ENGL - 5300 - Special Topics in Literary Studies (CI)
49. ENGL - 5310 - Contemporary Literature
50. ENVS - 2220 - General Ecology
51. ENVS - 4920 - Special Projects in Recreation Management
52. ENVS - 6830 - Graduate Student Publishing Seminar
53. ESOL - 2410 - Comprehending Lecture Discourse
54. ESOL - 2420 - Writing from Academic Sources
55. ESOL - 2440 - Academic Discourse
56. ESOL - 2460 - Reading from Academic Sources
57. ESOL - 2470 - Cross-Cultural Perspectives
58. FCHD - 3310 - Consumer Policy
59. FCHD - 3510 - Infancy and Early Childhood
60. FCHD - 3520 - Children in the Middle Years
61. FCHD - 3530 - Adolescence
62. FCHD - 4240 - Social and Family Gerontology
63. FCHD - 4820 - Methods for Family Life Educators
64. FCHD - 4830 - Senior Capstone Project
65. FCHD - 4950 - Practicum: Consumer Science
66. GEO - 1360 - Planet Earth

67. GEO - 1380 - Where Science and Society Meet

68. GEO - 5420 - Ore Deposits

69. GEO - 6420 - Ore Deposits

70. HIST - 3330 - Modern Russia and the Soviet Experience

71. HIST - 4566 - Modern Islamic Thought

72. IOGP - 5930 - State and Local Government Internship

73. JCOM - 1130 - News Writing

74. JCOM - 2180 - Beginning Photojournalism

75. JCOM - 3100 - Reporting Public Affairs (CI)

76. JCOM - 3320 - Strategic Research Methods in Public Relations (DSS)

77. JCOM - 4030 - Mass Media Law (DSS)

78. JCOM - 4150 - Advanced Digital Photojournalism

79. JCOM - 6430 - Mass Media Law

80. LAEP - 2720 - Site Planning and Design

81. LAEP - 4110 - Landscape Construction II

82. LAEP - 4910 - Professional Communication and Leadership

83. LAEP - 6160 - Professional Communication and Leadership

84. MAE - 6340 - Spacecraft Attitude Control Theory

85. MAE - 6345 - Spacecraft Attitude Control Applications

86. MUSC - 2210 - Advanced Conducting Ensemble

87. NDFS - 3600 - Medical Terminology for Health Care Professionals

88. NDFS - 4990 -

89. NDFS - 5210 - Advanced Public Health Nutrition

90. NDFS - 6640 - Food Proteins & Enzymes

91. NDFS - 6700 - Dairy Chemistry

92. NDFS - 6790 - Current Issues in Dietetics

93. NEPA - 6230 - Risk Communication for NEPA Specialists: Strategies and Implementation

94. PE - 4010 - Yoga Theory

95. POLS - 3260 - Politics and Society in Post-Colonial States

96. PSY - 3450 - Sensation and Perception

97. PSY - 3460 - Neuroscience I

98. RELS - 4566 - MODERN ISLAMIC THOUGHT

99. RELS - 4566 - Modern Islamic Thought

100. TEAL - 6340 - Integrating Literacy Across the Curriculum

101. TEAL - 6785 - Instructional Practices for English Learners

102. WATS - 2000 - Natural Resources Professional Orientation

103. WATS - 2220 - General Ecology

104. WATS - 5640 - Riparian Ecology and Management

105. WATS - 7640 - Riparian Ecology and Management

106. WILD - 3300 - Management Aspects of Wildlife Behavior (CI)

107. WILD - 3800 - Wildland Plants and Ecosystems

108. WILD - 3810 - Plant and Animal Populations

109. WILD - 4600 - Conservation Biology

110. WILD - 4700 - Ecological Foundations of Restoration

111. WILD - 4750 - Monitoring and Assessment in Natural Resource and Environmental Management

112. WILD - 5560 - Applied Avian Ecology

113. WILD - 6560 - Applied Avian Ecology

3. ***Program Proposals***
   https://usu.box.com/s/cwjtcc8ay50a6opdsej23gvyyren4tey

   Request from the Department of English in the College of Humanities and Social Sciences to offer an English Teaching Composite Baccalaureate degree.
   Motion to approve the Department of English proposal made by Mike Lyons. Seconded by Vijay Kannan. Proposal approved pending revisions. Jeannie Thomas will send revisions to Larry Smith and Michele Hillard.

   Request from the Department of Plants, Soils and Climate in the College of Agriculture and Applied Sciences to offer a Bachelor of Science degree in Climate Science.
   Motion to approve the Department of Plants, Soils and Climate proposal made by Dick Mueller. Seconded by Karen Mock. Proposal approved.

   Request from the Department of Watershed Sciences in the S.J. & Jessie E. Quinney College of Natural Resources to change the title in the current BS in Watershed and Earth Systems to BS in Management and Restoration of Aquatic Ecosystems.
   Motion to add this proposal to the agenda and approve the Department of Watershed Sciences proposal made by Mike Lyons. Seconded by Karen Mock. Proposal approved.

4. ***Other Business***
   Syllabus task force update – A final task force meeting will be scheduled to provide guidelines and layout for syllabi.

5. Election of AY 2016-2017 Curriculum Chaim
   Vijay Kannan was nominated by Ed Reeve to be the 2016-2017 Curriculum Chair. Vote was unanimous.

   Adjourned: 3:03 pm

Utah System of Higher Education
Changes to Existing Academic Program Proposal
Cover/Signature Page - Abbreviated Template

Institution Submitting Request:	Utah State University			
	Current		*Proposed (if applicable)*	
Program Title:	Agricultural Economics		Applied Economics	
Sponsoring School, College, or Division:	College of Agriculture and Applied Sciences			
Sponsoring Academic Department(s) or Unit(s):	Applied Economics			
Classification of Instruction Program Code[1]:	01.0103		45.0602	
Min/Max Credit Hours for Full Program Required:	120	/ Max Cr Hr	120	/ Max Cr Hr
Proposed Effective Term for Program Change[2]:	Fall	2017		
Institutional Board of Trustees' Approval Date:				
Award Type:	BS			

Program Change Type (check all that apply):

☒	Name Change of Existing Program
☐	Program Restructure with or without Consolidation
☐	Program Transfer to a new academic department or unit
☐	Program Suspension
☐	Program Discontinuation
☐	Reinstatement of Previously Suspended Program
☐	Out of Service Area Delivery Program

Chief Academic Officer (or Designee) Signature:
I, the Chief Academic Officer or Designee, certify that all required institutional approvals have been obtained prior to submitting this request to the Office of the Commissioner.

Please type your first and last name _____ Date:

☐ I understand that checking this box constitutes my legal signature.

1 For CIP code classifications, please see http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55.
2 "Proposed Effective Term" refers to term when change to program is published. For Suspensions and Discontinuations, "effective term" refers to the term the program will suspend admissions.

Program Change Description - Abbreviated Template

Section I: The Request

Utah State University requests approval to change name from Agricultural Economics to Applied Economics effective Fall 2017. This action was approved by the institutional Board of Trustees on ___ .

Section II: Program Proposal

Program Change Description/Rationale

Agricultural Economics degrees have traditionally been the more science based degrees in many agricultural economics departments. In more recent times, many departments have broadened their programs and many traditional agricultural economics departments have changed their names to applied economics. Utah State University has followed this national trend with the department of Applied Economics name change in 2008. The Applied Economics department is requesting the name change for the B.S. degree from Agricultural Economics to Applied Economics to be more reflective of the breadth of the degree and to be more in line with the Agricultural and Applied Economics Association trends.

Consistency with Institutional Mission/Institutional Impact

This proposed B.S. major name change is consistent with the USU mission of being a student-centered land grant university. The new name is more reflective of the student's interests and likely helps them be marketable to a broader set of opportunities.

Finances

This change will have no financial impact as it is only a name change to an existing degree.

Utah System of Higher Education
New Academic Program Proposal
Cover/Signature Page - Abbreviated Template

Institution Submitting Request: Utah State University

Proposed or Current Program Title: Minor in Residential Landscape Design

Sponsoring School, College, or Division: College of Agriculture & Applied Sciences

Sponsoring Academic Department(s) or Unit(s): Plant, Soils & Climate

Classification of Instructional Program Code[1] : 01.0601

Min/Max Credit Hours Required of Full Program: 16 Cr Hr / 17 Cr Hr

Proposed Beginning Term[2]: Spring 2017

Institutional Board of Trustees' Approval Date:

☐	Certificate of Proficiency	☐ Entry-level CTE CP	☐ Mid-level CP
☐	Certificate of Completion		
X	Minor		
☐	Graduate Certificate		
☐	K-12 Endorsement Program		
☐	NEW Emphasis for Regent-Approved Program		
☐	Out of Service Area Delivery Program		

Chief Academic Officer (or Designee) Signature:
I, the Chief Academic Officer or Designee, certify that all required institutional approvals have been obtained prior to submitting this request to the Office of the Commissioner.

_____ Date:

☐ I understand that checking this box constitutes my legal signature.

[1] For CIP code classifications, please see http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55.
[2] "Proposed Beginning Term" refers to first term after Regent approval that students may declare this program.

Program Description - Abbreviated Template

Section I: The Request

Over the past several years, the Plants, Soils, and Climate Department (PSC) has offered a Bachelors degree in Residential Landscape Design & Construction. We are proposing a minor in Residential Landscape Design as a compliment to students majoring in Plant Science or Horticulture as well as students in other disciplines. In regards to the approval of the minor, it is important to realize that the faculty, facilities & funding will remain unchanged.

Section II: Program

Proposal/Needs Assessment Program Description/Rationale

Over the past several years, the Plants, Soils, and Climate Department (PSC) has offered a Bachelors degree in Residential Landscape Design & Construction. We are proposing a minor in Residential Landscape Design as a compliment to students majoring in Plant Science or Horticulture as well as students in other disciplines. In regards to the approval of the minor, it is important to realize that the faculty, facilities & funding will remain unchanged.

Labor Market Demand

This program is valuable and will provide skills for students interested in starting a landscape business or progressing to higher positions in organizations that provide landscape services. The continued urbanization and population growth of Utah make it highly likely that there will continue to be strong labor market demand for graduates in horticulture focused on urban needs. The Utah Department of Workforce Services describes the positions relating to First-Line Supervisors of Landscaping, Lawn Service, and Grounds keeping Workers as having a good employment outlook and relatively high wages. The department also describes the field as having faster than average employment growth with a high volume of annual job openings. Business expansion, as opposed to the need for replacements, will provide the majority of job openings in the coming decade. This is likely due to the expectations of 1.6 million new residents in Utah by 2040 and 80% of these located along the Wasatch Front (Utah Legislature Briefing paper, Feb. 2014). As a result, it is expected that long term trends will be consistent or more likely grow for this degree with the increased demands on urban landscapes.

Students especially those in Plant Science or Horticulture that will work in an urban setting will have more tools to make them marketable if they have the working knowledge not only in plants, production, maintenance & care, but in residential landscape design as well. Currently we have students who major in RLDC and minor in Horticulture. This minor will allow students who choose to have their degree with more emphasis in plants & the sciences to be able to add that design component to their skill set.

This proposed minor is different from the minor in Landscape Architecture & all classes would be available on the Logan Campus & for students in RC along the Wasatch Front.

Consistency with Institutional Mission/Impact on Other USHE Institutions

We do not foresee the new minor affecting resources in a significant way. The faculty, staff and facilities are already in place and teaching the classes used in this proposed minor, nor will there be a change in existing administrative structures. The classes are all currently being taught for the BS in RLDC that is in Logan & in RC along the Wasatch Front.

Finances

Funding for the program is already in place and additional funds are not required. The new minor would increase students somewhat generating additional tuition income.

Section III: Curriculum

Program Curriculum

		Course Number	NEW Course	Course Title	Credit Hours
		General Education Courses (list specific courses if recommended for this program on Degree Map)			
				General Education Credit Hour Sub-Total	
		Required Courses			
+	-	Prerequisite			
+	-	PSC	2600	Herbaceous Plant Materials	3
+	-	PSC	2620	Woody Plant Materials	3
+	-	Required Courses			
+	-	LAEP	1200	2 D Graphics Representation	4
+	-	PSC	3300	Residential Landscape Design	3
+	-	PSC	4301	Computer Aided Residential Landscape Design	2
+	-	PSC	4302	Advanced Computer Aided Residential Landscape Design	2
+	-	PSC	5090	Sustainable Low Water Use Landscapes	3
+	-			Sub-Total	14
				Add A Group of Courses	
				Required Course Credit Hour Sub-Total	
		Elective Courses			
+	-			Choose one course	
+	-	PSC	3430	Landscape Construction Methods	2
+	-	PSC	3440	Landscape Business Practices	3
+	-				
+	-				
+	-				
+	-				
+	-				
+	-				
+	-				
				Add A Group of Courses	
				Elective Credit Hour Sub-Total	2-3
				Core Curriculum Credit Hour Sub-Total	16-17

Program Curriculum Narrative

Degree Map

Degree maps pertain to undergraduate programs ONLY. Provide a degree map for proposed program. Degree Maps were approved by the State Board of Regents on July 17, 2014 as a degree completion measure. Degree maps or graduation plans are a suggested semester-by-semester class schedule that includes prefix, number, title, and semester hours. For more details see http://higheredutah.org/pdf/agendas/201407/TAB%20A%202014-7-18.pdf (Item #3).

Program Schedule for Logan students: must have pre requisite classes PSC 2600 & PSC 2620

Fall or any semester prior to PSC 3300 LAEP 1200 (4) 2 D Graphics Representation	Spring PSC 3300 (3) Residential Landscape Design	
Fall PSC 4301 (2) Computer Aided Residential Landscape Design (elective: PSC 3430 (2) Landscape Construction Methods)	Spring PSC 4302 (2) Advanced Computer Aided Residential Landscape Design (elective: PSC 3440 (3) Landscape Business Practices	Summer PSC 5090 (3) Sustainable Low Water Use Landscapes

Program Schedule for RC students: must have pre requisite classes PSC 2600 & PSC 2620

Fall odd years or any semester prior to PSC 3300 LAEP 1200 (4) 2 D Graphics Representation	Spring even years PSC 3300 (3) Residential Landscape Design	
Fall even years PSC 4301 (2) Computer Aided Residential Landscape Design (elective: PSC 3430 (2) Landscape Construction Methods)	Spring odd years PSC 4302 (2) Advanced Computer Aided Residential Landscape Design (elective: PSC 3440 (3) Landscape Business Practices	Summer odd years PSC 5090 (3) Sustainable Low Water Use Landscapes

Toggle Cut-and-Paste Toggle Table

Cover/Signature Page - Abbreviated Template/Abbreviated Template with Curriculum

Institution Submitting Request: Utah State University
Proposed Title: Forest Ecology specialization within the M.S. and Ph.D. Ecology degrees
Currently Approved Title: n/a
School or Division or Location: Quinney College of Natural Resources, USU Logan campus
Department(s) or Area(s) Location: Wildland Resources
Recommended Classification of Instructional Programs (CIP) Code[1] (for new programs): 03.0502
Current Classification of Instructional Programs (CIP) Code (for existing programs): n/a
Proposed Beginning Date (for new programs): 01/07/2017
Institutional Board of Trustees' Approval Date:

Proposal Type (check all that apply):

Regents' General Consent Calendar Items		
R401-5 OCHE Review and Recommendation; Approval on General Consent Calendar		
SECTION NO.		ITEM
5.1.1	☐	Minor*
5.1.2	☒	Emphasis* (Forest Ecology Specialization)
5.2.1	☐	(CER P) Certificate of Proficiency*
5.2.3	☐	(GCR) Graduate Certificate*
5.4.1	☐	New Administrative Unit
	☐	Administrative Unit Transfer
	☐	Administrative Unit Restructure
	☐	Administrative Unit Consolidation
5.4.2	☐	Conditional Three-Year Approval for New Centers, Institutes, or Bureaus
5.4.3	☐	New Center
	☐	New Institute
	☐	New Bureau
5.5.1	☐	Out-of-Service Area Delivery of Programs
5.5.2	☐	Program Transfer
	☐	Program Restructure
	☐	Program Consolidation
5.5.3	☐	Name Change of Existing Programs
5.5.4	☐	Program Discontinuation
	☐	Program Suspension
5.5.5	☐	Reinstatement of Previously Suspended Program
	☐	Reinstatement of Previously Suspended Administrative Unit

**Requires "Section V: Program Curriculum" of Abbreviated Template*

Chief Academic Officer (or Designee) Signature:
I certify that all required institutional approvals have been obtained prior to submitting this request to the Office of the Commissioner.

_____
Signature Date:
Printed Name:

[1] CIP codes must be recommended by the submitting institution. For CIP code classifications, please see http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55.

Program Request - Abbreviated Template
Utah State University
Specialization in Forest Ecology, MS or PhD in Ecology
MM/DD/YEAR

Section I: Request

Utah State University offers MS and PhD degrees in Ecology through multiple Departments and Colleges at Utah State University. Two specializations exist for this degree: the Aquatic Ecology specialization (offered through the Watershed Sciences Department) and the Wildlife Ecology specialization (offered through the Wildland Resources Department). The Wildland Resources Department (WILD) proposes to add a Forest Ecology specialization at the MS and PhD levels. This would be a specialization conferred only by the Wildland Resources Department, which is the home to the majority of courses involved in the proposal, and is also home to the majority of USU faculty with expertise in Forestry.

In the past, Departments offered a variety of different types of ecology-related graduate degrees, but several years ago most of these (including Forest Ecology) were collapsed into a single degree in Ecology (MS or PhD) with a set of core requirements. Some of these original degrees were retained as specializations, including Aquatic Ecology and Wildlife Ecology. Forest Ecology was not retained as a specialization at that time by WILD.

Section II: Need

The forestry profession is increasingly incorporating ecological principles, with sustainability, wildlife and fisheries habitat conservation, water quality issues, and carbon sequestration become management priorities. Similarly, forestry-related employers increasingly value ecological experience and expertise in students, and students are increasingly interested in ecological perspectives. For example, beginning in 2012, the USDA Forest Service is required to include substantive assessment of "ecological integrity" of forest ecosystems in their management plans. The Utah State University Wildland Resources Department offers a degree in Forestry, but this degree is not explicitly focused on forest ecology. Students with specific interest in forest ecology careers must choose between having a degree called "Forestry" but enjoying none of the benefits of Ecology Center affiliation, or having a degree called "Ecology" and relying on future employers to notice forestry-related coursework on their transcripts. A Forest Ecology specialization transcript designation would make it simpler for both students and future employers to understand the degree focus and content. Through informal discussions among faculty and graduate students in WILD, both of these advantages have become apparent. As an example, of the 26 graduate students completing Ecology degrees in WILD since 2012, 5 would likely have opted for the Forest Ecology specialization had it existed, according to their advisors. There are at least 4 graduate students currently enrolled in WILD Forestry and Ecology degree programs who would also prefer a Forest Ecology specialization designation.

Section III: Institutional Impact

No significant institutional impact is anticipated. Two of the courses required for this specialization (WILD 6350 and WILD 6730) are already options in the Ecology degree course menus so students choosing a specialization would simply choose those courses. The proposed specialization will also require one additional course for MS students (2 for PhD students) to come from a menu of 5 WILD courses which are

already being offered. The enrollment in all of these courses is currently quite small, and additional students can easily be accommodated without adding sections, instructors, or teaching assistants. Graduate students in forest ecology research are typically in WILD and typically take these courses anyway, so the specialization is a way to formalize and recognize this emphasis.

Section IV: Finances

No budgetary impacts are anticipated.

Section V: Program Curriculum

The Forest Ecology specialization within the Ecology degree would meet existing requirements within WILD as well as the existing requirements for the Ecology graduate degree (MS or PhD). The proposed Forest Ecology specialization would require the following elements:

1) Both MS and PhD students are required to take:
   WILD 6350 Wildland Soils (Spring, 3 cr.; satisfies existing Biophysical Ecology block requirement in Ecology degree)
2) Both MS and PhD students are required to take:
   WILD 6730 Forest Community Ecology (Spring, offered in odd numbered years, 3 cr.; satisfies existing Organismic, Population & Evolutionary Ecology block requirement in Ecology degree)
3) For PhD students: one course from any of the other remaining Ecology blocks (an existing requirement for the Ecology degree)
4) One of the following courses for MS students, two for PhD students:
   WILD 5710 Forest Vegetation Disturbance Ecology and Management (Fall, 3 cr.)
   WILD 6570 Forest Ecology of the Sierra Nevada and White Mountains (Summer, 3 cr.)
   WILD 5700 Forest Assessment and Management (Spring, 3 cr.)
   WILD 7200 Plant Physiological Ecology (Fall, 3 cr.)
   WILD 7400 Plant Population Ecology (Fall, 3 cr.)
5) WILD 6800/7800 Wildland Resources Department seminar (Fall & Spring, 1 cr., an existing requirement for all WILD graduate students)
6) WILD 6780 Ecology seminar (Fall, Spring, 1 cr., an existing requirement for the Ecology degree) MS students must register for this seminar once in each of the two years of their programs; PhD students must register for this seminar once in each of three years of their programs.
7) The remaining credit hours for the MS or PhD degree would be determined by the student and his/her committee and following the remaining requirements of the Ecology degree.

The existing Ecology degree core requirements (MS and PhD) are described below. Courses designated in the proposed Forest Ecology specialization which are also in the Ecology degree course menus (blocks) are in bold font. The Ecology graduate degree requirements are few and flexible. Students must meet these requirements, as well as any additional ones specified by their home departments. Specific courses are chosen in consultation with the student's Graduate Advisory Committee. There are no additional requirements in WILD Ecology degrees.

1) The degree is research-based and requires a thesis or dissertation.

2) Regular participation in the Ecology Center Seminar Series and associated events is expected.
MS students must register for the Ecology Seminar in each of two years during their program of study.
PhD students must register for Ecology Seminar in each of three years during their program of study.

3) The degree requires some demonstrated breadth of knowledge in Ecology, most often satisfied with courses from the topical Blocks listed below.

MS students must take three credits each from two of the Blocks.
PhD students must take three credits each from three of the Blocks.
Students may substitute other courses from the same topical area by request of the graduate supervisory committee to the Ecology Center Director.

Block #1: Biophysical Ecology

CEE 6740 Environmental Quality Modeling/Surface Water Quality Modeling
GEO/ PSC/WATS 6680 Paleoclimatology
GEO/WATS 6150 Fluvial Geomorphology
PSC 6130 Soil Genesis, Morphology, and Classification
PSC 6500 Environmental Physics of Land Ecosystems and Climate
PSC 6820 Environmental Biophysics
WATS 6900 Fluvial Hydraulics & Ecohydraulics
WILD/PSC 5350/6350 Wildland Soils

Block #2: Organismic, Population, and Evolutionary Ecology

BIOL 6240 Physiological Ecology of Vertebrates
BIOL 6260 Behavioral Ecology
BIOL 6380 Evolutionary Genetics
BIOL 6600 Comparative Animal Physiology
WATS 6230/7230 Fish Ecology
WILD 6401 Population State Variables
WILD 6402 Demographic Vital Rates
WILD 6403 Dynamics of Structured Populations
WILD 6720/7720 Advanced Conservation Biology
WILD 6730 Forest Community Ecology
WILD 7200 Plant Physiological Ecology
WILD 7400 Plant Population Ecology

Block #3: Community, Ecosystem, and Landscape Ecology

BIOL 6010 Biogeography
BIOL/PSC/WILD 6200 Biogeochemistry of Terrestrial Ecosystems
BIOL 6590 Animal Community Ecology

WATS 6310 Wetland Ecology and Management
WATS/WILD 6700 Restoration Ecology
WATS 6820/7820 Stream Ecology
WILD 6710/7710 Landscape Ecology
WILD 6770 Plant Community Ecology
WILD 6900 Invasion Ecology
WILD 7000 Wildland Ecosystem Management

Block #4: Quantitative Ecology

BIOL/MATH 6820 Applied Math in Biology (Powell)
BIOL 6750 Introduction to Programming and Database Management for Biologists
BIOL 6750 Advanced Programming and Database Management for Biologists
STAT 5120 Categorical Data Analysis
STAT 5570/6570 Statistical Bioinformatics
STAT 5600 Applied Multivariate Statistics
STAT 6200 Analysis of Unbalanced Data and Complex Experimental Designs
WATS 6900 Hydrologic Modeling for Watershed Sciences
WATS 6920 Geographic Information Systems
WILD 6510 Topics in Spatial Ecology

Block #5: Human Ecology

ASTE 5260/6260 Environmental Aspects of Agricultural Systems
ENVS 6150 Conservation Policy for Private Lands
ENVS 6320 Water Law and Policy in the United States
ENVS 6900 Introduction to Environmental Law and Policy
ENVS 6400 Ecological Aspects of Wildland Recreation
ENVS 6580 Sustainable Nature-Based Tourism
ENVS 6200 Bioregional Analysis and Planning
LAEP 6110 Landscape Planning for Wildlife
LAEP 6270 Site Analysis: Social, Behavioral, and Biophysical Dimensions
ENVS 6900 Translational Ecology
APEC 5560 Natural Resource and Environmental Economics
ENVS 5550/6550 Sustainability: Concepts and Measurement
ANTH 5340/6340 Archaeology of the Desert West
ENVS 6300/7300 Social and Environmental Psychology of Natural Resources
HIST 6460 Environmental History (Conte)
SOC 5640/6640 Conflict Management in Natural Resources
SOC 6620 Environment, Technology, and Social Change
SOC 6630 Natural Resources and Social Development