CLAS C&C

Agenda Part I

Chair: Pamela Bedore

2.25.2020

**A. Approvals by the Chair**

2020-65 COMM 5895 Add Special Topic: Advanced Interpersonal Communication

2020-66 ENGL 3695 Add Special Topic: Writing with Algorithms

2020-67 HDFS 3095 Add Special Topic: Exploring Conservation and Sustainability with Preschoolers

**B. New Business**

2020-68 URBN 3000 Revise Course (guest: Kenneth Foote)

2020-69 POLS/URBN 3632 Revise Course (guest: Kenneth Foote)

2020-70 HIST/URBN 3650 Revise Course (guest: Kenneth Foote) (G) (S)

2020-87 WGSS 2253 Add Course (guest: Debanuj Dasgupta) (S)

2020-71 AAAS/SOCI 2200 Add Course (S)

2020-72 CHEM 1124Q Revise Course (G) (S)

2020-73 ENGL 3303 Revise Course

2020-74 FREN 3211W Add Course (G) (S)

2020-75 GEOG 4090 Revise Course (S)

2020-76 GEOG Revise Major

2020-77 GIS Revise Minor

2020-78 MARN 1002E Revise Course (G) (S)

2020-79 MARN 1003E Revise Course (G) (S)

2020-80 MARN 5201 Add Course

2020-81 MARN 6032 Add Course

2020-82 MARN 6033 Add Course

2020-83 Marine Sciences Add Minor

2020-84 Oceanography Delete Minor

2020-85 SLHS 1150W Add Course (G) (S)

2020-86 SLHS 5378 Add Course

2020-88 POLS 3240E Revise Course (guest: Prakash Kashwan) (G) (S)

**C. Announcements and Discussion**

1. The Research and Experiential Courses webform can now be used for graduate courses.

2. Policy Mismatch re: S/U graded internships (Bedore)

3. Hybrid courses (Adamsons)

4. Alternate BS Discussion (Henning re: dual degree concerns and Knecht re: proposal to add stats)

**CATALOG COPY:**

**2020-68 URBN 3000 Revise Course**

*Current Copy:*

URBN 3000. Urban Anthropology

3.00 credits

Prerequisites: None.

Grading Basis: Graded

A general course on urbanization, emphasizing contrasts between "developed" and "developing" countries.

*Proposed Copy:*

URBN 3210. Urban Anthropology

3.00 credits

Prerequisites: None.

Grading Basis: Graded

A general course on urbanization, emphasizing contrasts between "developed" and "developing" countries.

**2020-69 POLS/URBN 3632 Revise Course**

*Current Copy:*

POLS 3632. Urban Politics

3.00 credits

Prerequisites: Open only to juniors or higher.

Grading Basis: Graded

Political systems and problems confronting urban governments.

*Proposed Copy:*

POLS 3632. Urban Politics

(also offered as URBN 3632)

3.00 credits

Prerequisites: Open only to juniors or higher.

Grading Basis: Graded

Political systems and problems confronting urban governments.

**2020-70 HIST/URBN 3650 Revise Course (G) (S)**

*Current Copy:*

URBN 3650. History of Urban Latin America

Also offered as: HIST 3650

3.00 credits

Prerequisites: Open to sophomores or higher. Not open to students who have passed HIST 3095 when taught as “Latin American Urban History.”

Grading Basis: Graded

The development of Latin American cities with emphasis on social, political, physical and environmental change, from Spanish conquest to present. CA 1.

*Proposed Copy:*

URBN 2650. History of Urban Latin America

Also offered as: HIST 2650

3.00 credits

Prerequisites: Open to sophomores or higher. Not open to students who have passed HIST 3095 when taught as “Latin American Urban History.”

Grading Basis: Graded

The development of Latin American cities with emphasis on social, political, physical and environmental change, from Spanish conquest to present. CA 1.

**2020-87 WGSS 2253 Add Course (guest: Debanuj Dasgupta) (S)**

*Proposed Copy:*

WGSS 2253. Introduction to Queer Studies

Three credits.

Prerequisites: None

Grading Basis: Graded

Introduction to the growing interdisciplinary field of queer studies. Provides an understanding of intersectional approaches to human sexuality and how LGBT movements are shaped within the world’s largest countries such as Brazil, India, and China (also known as the BRIC nations). Explores a range of issues including how to study queer sexualities in a globalizing world, methodological and theoretical approaches, the role of feminism and social justice activism in Queer Studies, and the integration of transgender studies into the field.

**2020-71 AAAS/SOCI 2200 Add Course (S)**

*Proposed Copy:*

AAAS/SOCI 2200. Introducing India: Diversity and Dynamism

Three credits.

Recommended Preparation: one introductory AAAS or SOCI course.

An introduction to the historical, political, social, economic, and cultural diversity of India, the largest democracy in the world. Topics may include: cultural diversity in languages, religions, and regions; socio-political challenges; power relations that construct patterns of privilege and marginalization; and contemporary human rights issues.

**2020-72 CHEM 1124Q Revise Course (G) (S)**

*Current Copy:*

Fundamentals of General Chemistry I

4.00 credits

Prerequisites: Not open to students who have passed CHEM 1127, 1137 or 1147.

Recommended Preparation: MATH 1011 or equivalent.

Grading Basis: Graded

The first semester of a 3-semester sequence that is designed to provide a foundation for the principles of chemistry with special guidance provided for the quantitative aspects of the material. Topics include the physical and chemical properties of some elements, chemical stoichiometry, gases, atomic theory and covalent bonding. CA 3-LAB.

*Proposed Copy:*

Fundamentals of General Chemistry I

4.00 credits

Prerequisites: Not open to students who have passed CHEM 1127, 1137 or 1147. Students who have passed CHEM 1122 will receive 2 units for CHEM 1124.

Recommended Preparation: MATH 1011 or equivalent.

Grading Basis: Graded

The first semester of a 3-semester sequence that is designed to provide a foundation for the principles of chemistry with special guidance provided for the quantitative aspects of the material. Topics include the physical and chemical properties of some elements, chemical stoichiometry, gases, atomic theory and covalent bonding. CA 3-LAB.

**2020-73 ENGL 3303 Revise Course**

*Current Copy:*

ENGL 3303. Studies in Early Literature in English

3.00 credits

Prerequisites: ENGL 1010 or 1011 or 2011; open to juniors or higher.

Grading Basis: Graded

Studies in literature written in English before 1800.

*Proposed Copy:*

ENGL 3303. Studies in Early Literature in English

3.00 credits

Prerequisites: ENGL 1010 or 1011 or 2011; open to juniors or higher. Repeatable with a change of topic.

Grading Basis: Graded

Studies in literature written in English before 1800.

**2020-74 FREN 3211W Add Course (G) (S)**

*Proposed Copy:*

FREN 3211W. Contemporary France

3.00 credits

Prerequisites: ENGL 1010 or 1011 or 2011.

Recommended preparation: FREN 1164 or 1175 or 3 years high school French or instructor consent.

Grading Basis: Graded

An historical and cultural overview of France in the 20th and 21st centuries: from D-Day to the European Union, from Communism to the Green Party, from ballad crooners to rap, from love stories to action films; the changing French nation through authentic documents, literary texts, and films. CA 1. CA 4-INT.

**2020-75 GEOG 4090 Revise Course (S)**

*Current Copy:*

GEOG 4090. Internship in Geography: Field Study

1.00 - 3.00 credits

Prerequisites: Must be taken with GEOG 4091; open to juniors or higher

Grading Basis: Satisfactory/Unsatisfactory

A fieldwork internship program under the direction and supervision of the geography staff. Students will be placed in agencies or industries where their academic training will be applied. One 8-hour work day per week (or its equivalent) for the host agency during the course of the semester will be necessary for 3 academic credits. Students taking this course will be assigned a final grade of S (satisfactory) or U (unsatisfactory.) May not be repeated for credit. Hours by arrangement with hosting agency, not to exceed 16 hours per week.

*Proposed Copy:*

GEOG 4090. Internship in Geography: Field Study

1.00 - 3.00 credits. May be repeated to a maximum of fifteen credits. Only six credits of internship (between GEOG 4090 and 4091) may count towards the GEOG or GIS major. Prerequisites: Must be taken with at least one credit of GEOG 4091 if more than one internship credit is requested in a semester; Open to sophomores or higher.

Grading Basis: Satisfactory/Unsatisfactory

A fieldwork internship program under the direction and supervision of the geography staff. Students will be placed in agencies or industries where their academic training will be applied. One 8-hour work day per week (or its equivalent) for the host agency during the course of the semester will be necessary for 3 academic credits. Hours by arrangement with hosting agency, not to exceed 16 hours per week.

**2020-76 GEOG Revise Major**

*Current Copy:*

Bachelor of Sciences

The B.S. degree requires 31 credits in 2000-level or above geography courses and 12 credits of closely related course work in other departments. B.S. majors must complete a basic core of three courses: [GEOG 2100](https://catalog.uconn.edu/GEOG/#2100) or [2200](https://catalog.uconn.edu/GEOG/#2200), [2300](https://catalog.uconn.edu/GEOG/#2300), and [2500](https://catalog.uconn.edu/GEOG/#2500). B.S. majors must take 21 additional credits in Geography, including at least four courses from either “methods” courses (choice of [GEOG 2505](https://catalog.uconn.edu/GEOG/#2505), [2410](https://catalog.uconn.edu/GEOG/#2410), [2510](https://catalog.uconn.edu/GEOG/#2510), [3420](https://catalog.uconn.edu/GEOG/#3420), [3500Q](https://catalog.uconn.edu/GEOG/#3500Q), [3505](https://catalog.uconn.edu/GEOG/#3505), [3510](https://catalog.uconn.edu/GEOG/#3510), [4230](https://catalog.uconn.edu/GEOG/#4230), [4515](https://catalog.uconn.edu/GEOG/#4515), or [4520](https://catalog.uconn.edu/GEOG/#4520)), or “physical” courses (choice of [GEOG 2310](https://catalog.uconn.edu/GEOG/#2310), [3310](https://catalog.uconn.edu/GEOG/#3310), [3400](https://catalog.uconn.edu/GEOG/#3400), [3410](https://catalog.uconn.edu/GEOG/#3410), [3420](https://catalog.uconn.edu/GEOG/#3420), [3505](https://catalog.uconn.edu/GEOG/#3505), [4230](https://catalog.uconn.edu/GEOG/#4230), or [4300](https://catalog.uconn.edu/GEOG/#4300)), in addition to one “W” course, in consultation with their departmental advisor.

*Proposed Copy:*

Bachelor of Sciences

The B.S. degree requires 31 credits in 2000-level or above geography courses and 12 credits of closely related course work in other departments. B.S. majors must complete a basic core of three courses: [GEOG 2100](https://catalog.uconn.edu/GEOG/#2100) or [2200](https://catalog.uconn.edu/GEOG/#2200), [2300](https://catalog.uconn.edu/GEOG/#2300), and [2500](https://catalog.uconn.edu/GEOG/#2500). B.S. majors must take 21 additional credits in Geography, including at least four courses from either “methods” courses (choice of [GEOG 2505](https://catalog.uconn.edu/GEOG/#2505), [2410](https://catalog.uconn.edu/GEOG/#2410), [2510](https://catalog.uconn.edu/GEOG/#2510), [3420](https://catalog.uconn.edu/GEOG/#3420), [3500Q](https://catalog.uconn.edu/GEOG/#3500Q), [3505](https://catalog.uconn.edu/GEOG/#3505), [3510](https://catalog.uconn.edu/GEOG/#3510), [4230](https://catalog.uconn.edu/GEOG/#4230), [4515](https://catalog.uconn.edu/GEOG/#4515), or [4520](https://catalog.uconn.edu/GEOG/#4520)), or “physical” courses (choice of [GEOG 2310](https://catalog.uconn.edu/GEOG/#2310), [3310](https://catalog.uconn.edu/GEOG/#3310), [3400](https://catalog.uconn.edu/GEOG/#3400), [3410](https://catalog.uconn.edu/GEOG/#3410), [3420](https://catalog.uconn.edu/GEOG/#3420), [3505](https://catalog.uconn.edu/GEOG/#3505), [4230](https://catalog.uconn.edu/GEOG/#4230), or [4300](https://catalog.uconn.edu/GEOG/#4300)), in addition to one “W” course, in consultation with their departmental advisor. The 31-credit requirement may also be met with 4090, 4091, 4093, and 4095, with advisor consent.

**2020-77 GIS Revise Minor**

*Current Copy:*

Geographic Information Science Minor

The minor consists of courses that provide a strong introduction to the field of Geographic Information Science – the acquisition, evaluation, modeling and analysis of geospatial data. Students electing this minor must complete at least fifteen credits from the following:

1. [GEOG 2500](https://catalog.uconn.edu/GEOG/#2500).
2. At least three credits from the following [GEOG 2505](https://catalog.uconn.edu/GEOG/#2505) and [3530](https://catalog.uconn.edu/GEOG/#3530). Students are encouraged to take both.
3. At least six credits from the following courses, including three credits in GEOG: [CSE 2050](https://catalog.uconn.edu/CSE/#2050), [2100](https://catalog.uconn.edu/CSE/#2100); [ECON 2326](https://catalog.uconn.edu/ECON/#2326); [GEOG 2410](https://catalog.uconn.edu/GEOG/#2410), [2510](https://catalog.uconn.edu/GEOG/#2510), [3110](https://catalog.uconn.edu/GEOG/#3110), [3500Q](https://catalog.uconn.edu/GEOG/#3500Q), [3505](https://catalog.uconn.edu/GEOG/#3505), [3510](https://catalog.uconn.edu/GEOG/#3510), [3512](https://catalog.uconn.edu/GEOG/#3512), [4090](https://catalog.uconn.edu/GEOG/#4090)\*, [4095](https://catalog.uconn.edu/GEOG/#4095)\*, [4099](https://catalog.uconn.edu/GEOG/#4099)\*, [4130](https://catalog.uconn.edu/GEOG/#4130), [4230](https://catalog.uconn.edu/GEOG/#4230), [4515](https://catalog.uconn.edu/GEOG/#4515), [4516](https://catalog.uconn.edu/GEOG/#4516), [4518](https://catalog.uconn.edu/GEOG/#4518); [MATH 2110Q](https://catalog.uconn.edu/MATH/#2110Q), [3710](https://catalog.uconn.edu/MATH/#3710); [STAT 2215Q](https://catalog.uconn.edu/STAT/#2215Q).

\* Using GEOG 4090, 4095, 4099 requires permission of the undergraduate advisor or department head.

Geography majors may not use any Geography course to fulfill both major and minor requirements.

The minor is offered by the [Geography Department](http://geography.uconn.edu/)

*Proposed Copy:*

Geographic Information Science Minor

The minor consists of courses that provide a strong introduction to the field of Geographic Information Science – the acquisition, evaluation, modeling and analysis of geospatial data. Students electing this minor must complete at least fifteen credits from the following:

1. [GEOG 2500](https://catalog.uconn.edu/GEOG/#2500).
2. At least three credits from the following [GEOG 2505](https://catalog.uconn.edu/GEOG/#2505) and [3530](https://catalog.uconn.edu/GEOG/#3530). Students are encouraged to take both.
3. Three elective credits from GEOG methods classes: [GEOG 2410](https://catalog.uconn.edu/GEOG/#2410), [2510](https://catalog.uconn.edu/GEOG/#2510), [3110](https://catalog.uconn.edu/GEOG/#3110), [3500Q](https://catalog.uconn.edu/GEOG/#3500Q), [3505](https://catalog.uconn.edu/GEOG/#3505), [3510](https://catalog.uconn.edu/GEOG/#3510), [3512](https://catalog.uconn.edu/GEOG/#3512), [4090](https://catalog.uconn.edu/GEOG/#4090)\*, 4091\*, [4095](https://catalog.uconn.edu/GEOG/#4095)\*, [4099](https://catalog.uconn.edu/GEOG/#4099)\*, [4130](https://catalog.uconn.edu/GEOG/#4130), [4230](https://catalog.uconn.edu/GEOG/#4230), [4515](https://catalog.uconn.edu/GEOG/#4515), [4516](https://catalog.uconn.edu/GEOG/#4516), [4518](https://catalog.uconn.edu/GEOG/#4518), 4519.
4. Three additional credits from either the list of GEOG classes in the previous two points or the list of approved, related classes associated with the GIS Major.

\* Using GEOG 4090, 4091, 4095, 4099 requires permission of the undergraduate advisor or department head.

Geography majors may not use any Geography course to fulfill both major and minor requirements.

The minor is offered by the [Geography Department](http://geography.uconn.edu/)

**2020-78 MARN 1002E Revise Course (G) (S)**

*Current Copy:*

MARN 1002. Introduction to Oceanography

3.00 credits

Prerequisites: A background in secondary school physics, chemistry or biology is recommended. Not open to students who have passed MARN 1003, 2002 or 3001.

Grading Basis: Graded

Processes governing the geology, circulation, chemistry and biological productivity of the world's oceans. Emphasis is placed on the interactions and interrelationships between physical, chemical, biological and geological processes that contribute to both the stability and the variability of the marine environment. First and second semester Storrs and Avery Point. Students who complete both MARN 1002 and 1004 will receive credit for a CA 3 laboratory course. CA 3.

*Proposed Copy:*

MARN 1002E. Introduction to Oceanography

3.00 credits

Recommended Preparation: A background in secondary school physics, chemistry or biology. Not open to students who have passed MARN 1003, 2002 or 3001.

Grading Basis: Graded

Processes governing the geology, circulation, chemistry and biological productivity of the world's oceans. Emphasis is placed on the interactions and interrelationships between physical, chemical, biological and geological processes that contribute to both the stability and the variability of the marine environment. Students who complete both MARN 1002 and 1004 will receive credit for a CA 3 laboratory course. CA 3.

**2020-79 MARN 1003E Revise Course (G) (S)**

*Current Copy:*

MARN 1003. Introduction to Oceanography with Laboratory

4.00 credits

Prerequisites: Not open to students who have passed MARN 1002, 2002 or 3001.

Recommended preparation: A background in secondary school physics, chemistry or biology.

Grading Basis: Graded

Processes governing the geology, circulation, chemistry and biological productivity of the world's oceans. Emphasis is on the interactions and interrelationships of physical, chemical, biological and geological processes that contribute to both the stability and the variability of the marine environment. Laboratory experiments, hands-on exercises, and field observations including required cruise on research vessel. First semester (Avery Point). First and second semester (Storrs). CA 3-LAB.

*Proposed Copy:*

MARN 1003E. Introduction to Oceanography with Laboratory

4.00 credits

Recommended preparation: A background in secondary school physics, chemistry or biology. Not open to students who have passed MARN 1002, 2002 or 3001.

Grading Basis: Graded

Processes governing the geology, circulation, chemistry and biological productivity of the world's oceans. Emphasis is on the interactions and interrelationships of physical, chemical, biological and geological processes that contribute to both the stability and the variability of the marine environment. Laboratory experiments, hands-on exercises, and field observations. CA 3-LAB.

**2020-80 MARN 5201 Add Course**

*Proposed Copy:*

MARN 5201. Oceanographic Expedition

Three credits. Instructor consent required. May be repeated to a maximum of six credits with a change of topic.

Development of skills with modern and traditional methods used in making physical, chemical, biological and geological observation at sea from the R.V. Connecticut. Students should be prepared for a three-day expedition. Instrumentation, methods, data analysis and synthesis will be conducted in pre- and post-cruise seminars.

**2020-81 MARN 6032 Add Course**

*Proposed Copy:*

MARN 6032. Environmental Organic Chemistry I

Three credits.

Prerequisite: MARN 5030 or instructor consent. Not open for credit to students who have passed MARN 5995 when offered as "Environmental Organic Chemistry I."

Environmental factors governing the processes that determine the fate of organic chemicals in natural and engineered systems. Quantitative assessments based on thermodynamic principles of the environmental behavior of organic chemicals. Topics include multimedia partitioning between air, water, and particles, and photochemical and biodegradation models.

**2020-82 MARN 6033 Add Course**

*Proposed Copy:*

MARN 6033 Environmental Organic Chemistry II

Three credits.

Prerequisite: MARN 6032 or instructor consent. Not open for credit to students who have passed MARN 5995 when offered as “Environmental Organic Chemistry II.”

Environmental factors governing the processes that determine the fate of organic chemicals in natural and engineered systems. Quantitative assessments based on thermodynamic principles of the environmental behavior of organic chemicals. Topics include multimedia partitioning between air, water, and particles, and photochemical and biodegradation models.

**2020-83 Marine Sciences Add Minor**

*Proposed Copy:*

Marine Sciences Minor

Students wishing to complete this minor must take at least 15 credits of 2000-level or higher MARN courses.

The minor is offered by the Department of Marine Sciences. Students may not count the same course towards the Marine Biology minor offered by the Department of Marine Sciences.

**2020-84 Oceanography Delete Minor**

*Current Copy:*

Oceanography Minor

This minor focuses on biological, chemical, geological, and physical oceanography. Students pursuing the minor must take at least 15 credits of 2000-level and above courses, including 3 courses from Group A, and 2 additional courses from either group A or B:

 Group A: MARN 4010, 4030W, 4050, 4060

 Group B: MARN 2002, 3000, 3001, 3015, 3017, 3060

Marine Sciences majors may not choose MARN 4010. No more than 2 courses may be counted towards both this minor and the student’s major.

The minor is offered by the Department of Marine Sciences. More information is available by email at marinesciences@uconn.edu, or by phone at 860-405-9152.

**2020-85 SLHS 1150W Add Course (G) (S)**

*Proposed Copy:*

SLHS 1150W. Introduction to Communication Disorders

3.00 credits

Prerequisites: ENGL 1010 or 1011 or 2011. RHAG students cannot take more than 22 credits of 1000 level courses

Grading Basis: Graded

Introduction to normal communicative processes and to disorders of communication. CA 2. CA 4.

**2020-86 SLHS 5378 Add Course**

*Current Copy:*

SLHS 5378. Augmentative Alternative Communication in Speech-Language Pathology

3.00 credits

Prerequisites: Open to second year SLHS MA program students, others with permission.

Grading Basis: Graded

Principles of assessment, therapeutic intervention and diagnostic selection of no-, low-, mid- and/or high-technology Augmentative Alternative Communication for individuals with complex communication needs.

*Proposed Copy:*

SLHS 5378. Augmentative- Alternative Communication in Speech-Language Pathology

3.00 credits

Prerequisites: Open to second year SLHS MA program students, others with permission.

Grading Basis: Graded

Addresses the etiologies associated with severe communication impairments and related physical and/or cognitive-linguistic challenges;  instructs on the basic principles of AAC assessment and procedures; identifies potential AAC users, appropriate selection of symbols and vocabulary for no, low, mid and/or high-technology systems, seating and positioning, and access; and instructs on the principles of intervention and implementation of AAC systems within the clinic, school, medical, home and community settings across the lifespan.

**2020-88 POLS 3240E Revise Course (guest: Prakash Kashwan) (G) (S)**

*Current Copy:*

POLS 3240. Climate Justice

Three credits. Open to juniors or higher.

Introduction to major debates about the distributional consequences of climate change and the policies and programs meant to address it. Implications for the design of global, national, and subnational institutions of climate governance.

*Proposed Copy:*

POLS 3240E. Environmental and Climate Justice

Three credits. Open to juniors or higher.

Introduction to major debates about environmental and climate justice and the related policies and programs. Implications for the ongoing efforts to promote environmental stewardship and the design of global, national, and sub-national institutions of climate governance.

**C. ANNOUNCEMENTS AND DISCUSSION**

*1. The Research and Experiential Courses Webform (Bedore)*

This form can now be used for graduate as well as undergraduate courses. Please review the Senate’s recommendation and make any necessary adjustments to course numbers and names using the webform (accessible from the CLAS C&C website).

*2. Policy Mismatch re: S/U graded internships (Bedore)*

The current CLAS Internship Policy (1999) is not in step with the new recommendation from the Senate (2019) about consistent course numbering and naming for Research and Experiential Courses. There are two items for discussion here:

a. The policy refers to “Internship: Field Study” and “Internship: Research/Seminar,” but the Senate recommendation is to go through our catalog and determine if courses are:

--xx80 or xx90 Field Study/Field Experience;

--xx81 or xx91 Internship; or

--xx86 or xx96 Undergraduate Research.

b. The policy says that “Internship: Field Study” must be s/u graded, while “Internship: Research/Seminar” must be letter graded. There are letter-graded internships within CLAS.

*3. Hybrid courses (Adamsons)*

This is an open discussion about best practices and policies for hybrid courses.

*4. Alternate BS Discussion*

There are two items for discussion about the alternate BS

a. How are alternate BS requirements handled for double-major or dual-degree students? (Henning)

b. Is there an interest in creating a subcommittee to review the current gen ed requirements for the BS (perhaps by adding STATS)? Or is there a sense that the current BS gen ed requirements should stay fixed and majors wishing to require alternates should propose alternate BS requirements? (Knecht)