The University Curriculum Committee recommends approval of the following:

1. **New Courses**

   **FRSC 102. Introduction to Spatial Science.** (1-0). Credit 1. Provides students with an understanding of the spatial sciences, how they are applied for problem solving in a wide variety of fields, and what opportunities are available to professionals in the spatial sciences.

   **MATH 469. Introduction to Mathematical Biology.** (3-0). Credit 3. Introduction to mathematical modeling techniques in the biological sciences; continuous versus discrete models; deterministic versus stochastic models; includes population dynamics and ecology, spread of infectious diseases, population genetics and evolution, spatial pattern formation. Prerequisites: MATH 304, 308 or equivalent.

2. **Changes in Courses**

   **OCNG 205. Introduction to Ocean Studies.**
   
   Course title
   From: Introduction to Ocean Studies.
   To: Topics in Oceanography.

   **OCNG 401. Introduction to Oceanography.**
   
   Course title
   From: Introduction to Oceanography.
   To: Interdisciplinary Oceanography.

   **OCNG 430. Introduction to Geological Oceanography.**
   
   Prerequisite
   From: Junior or senior classification.
   To: OCNG 251 or 401 or GEOL 101 or 104 or GEOG 203; junior or senior classification.
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and 2 copies. Attach a course syllabus to each.

1. This request is submitted by the Department of __Forest Science__

2. Course prefix, number and complete title __FRSC-102 Introduction to Spatial Science__

3. Course description (not more than 50 words): The objective of this course is to provide students with an understanding of the spatial sciences, how they are applied for problem solving in a wide variety of fields, and what opportunities are available to professionals in the spatial sciences

4. Prerequisite(s) __none__

5. Is this a variable credit course? ☐ Yes ☑ No If yes, from __to__

6. Is this a repeatable course? ☐ Yes ☑ No If yes, this course may be taken ___ times. Will the course be repeated within the same semester/term? ☐ Yes ☑ No

7. Has this course been taught as a 489/689? ☐ Yes ☑ No If yes, how many times? __1__ Indicate the number of students enrolled for each academic period it was taught. __05C 12__

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)
   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography) B.S. in Spatial Science

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix Course # Title (exclude punctuation)

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<td>INTRO TO SPATIAL SCIENCE</td>
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Do not complete shaded area.

Approval recommended by:

Head of Department __1-31-06__ Date __7-21-06__

Chair, College Review Committee __Date__

Dean of College __2-9-06__ Date

Head of Department (if cross-listed course) Date

Submitted to Coordinating Board by:

Dean of College Date

Director of Academic Support Services Date

Effective Date

to have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.

OAR/AS-504
FRSC 102
Introduction to Spatial Sciences
(1 Credit)

Instructors: Dr. R. Srinivasan
Office: 221E Centeq Building B, 1500 Research Parkway
Phone: 845-5069
Email: r-srinivasan@tamu.edu

Office Hours: By appointment only. Please contact via email.

Prerequisite(s): None

Lecture: T 11:10 – 12:00

Text: No textbooks are required for this course.

Course Objectives:

The objective of this course is to provide students with an understanding of the spatial sciences, how they are applied for problem solving in a wide variety of fields, and what opportunities are available to professionals in the spatial sciences.

Attendance:

Make-ups on class assignments will not be allowed unless the student has a university-excused absence.

Grading:

Class Participation (attendance and class discussion/participation) 50 pts.
Assignments (written summary of weekly class presentations) 50 pts
Lecture Topics

1. General: What are the spatial sciences?  Week 1
3. GIS: hands-on lab  Week 3
5. GPS: hands-on lab  Week 5
6. Principles of Remote Sensing  Week 6
7. Remote Sensing: hands-on lab  Week 7
8. Water and flood study applications  Week 8
9. Emergency response  Week 9
10. Watershed modeling projects  Week 10
11. Wildlife management  Week 11
12. Natural resource management  Week 12
13. Environmental Consulting  Week 13
14. Urban Planning  Week 14

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Office of Student Life, Disabilities Services Officer B116 Cain Hall, or call 979-862-4570.

Aggie Code of Honor: An Aggie does not lie, cheat or steal or tolerate those who do.

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System.

For additional information please visit: www.tamu.edu/aggiehonor/
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and 25 copies. Attach a course syllabus to each.*

1. This request is submitted by the Department of ____________ Mathematics

2. Course prefix, number and complete title MATH 469 Introduction to Mathematical Biology

3. Course description (not more than 50 words) Introduction to mathematical modeling techniques in the biological sciences. Continuous vs discrete models; deterministic vs stochastic models. Application areas may include but are not limited to: population dynamics and ecology, spread of infectious diseases, population genetics and evolution, spatial pattern formation.

4. Prerequisite(s) MATH 304, MATH 308 or equivalent Cross-listed with ____________ Cross-listed courses require the signatures of both department heads.

5. Is this a variable credit course? ☐ Yes ☐ No If yes, from _________ to _________

6. Is this a repeatable course? ☐ Yes ☐ No If yes, this course may be taken _________ times. Will the course be repeated within the same semester/term? ☐ Yes ☐ No

7. Has this course been taught as a 489/689? ☐ Yes ☐ No If yes, how many times? 1 Indicate the number of students enrolled for each academic period it was taught. 04c (12 students)

8. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   B.S. in MATH and APMS

9. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

10. Prefix | Course # | Title (exclude punctuation)
      --- | ---- | ------------------------
      MATH | 469 INTRO MATH B I O L |

      Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
      0 0 0 0 0 3                - 0 1 0 3 6 6

      Do not complete shaded area.

Approval recommended by:

Head of Department Date Chair College Review Committee Date

Head of Department (if cross-listed course) Date Dean of College Date

Submitted to Coordinating Board by: Dean of College Date

Director of Academic Support Services Date

Effective Date

* Attach a syllabus according to the guidelines on the Internet site www.tamu.edu/admissions/oaras. To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.

OARAS 1009

5 of 9 B
Syllabus for Proposed MATH 469
Introduction to Mathematical Biology

Instructor: Dr. Jay R. Walton
Office: Blocker, 631B
Phone: 845-7242
Email: jwalton@math.tamu.edu
URL: http://www.math.tamu.edu/~jwalton/

1.0 Single Species Population Dynamics (9 hrs):
Discrete time models, continuous time models, delay effects, age structured models, size structured models.

2.0 Interacting Species Models (12 hrs):
Host-parasitoid interactions, Lotka-Volterra predator-prey models, competition models, ecosystem models.

3.0 Infectious Disease Models (12 hrs):
Simple epidemic and SIS diseases, SIR epidemics, age-structured populations, vector-borne diseases.

4.0 Population Genetics and Evolution (12 hrs):
Mendelian genetics in populations, selection pressure, balance between mutation and selection, evolution of a genetic system, game theory.

GRADING SYSTEM
Midterm Exam 20%
Final Exam 20%
Homework 10%
Term Projects 50%

PREREQUISITES
MATH 308 (Ordinary Differential Equations), MATH 304 (Linear Algebra) or equivalent or permission of instructor

TEXT

Copyright Information: All written and web materials for this course have an implied copyright. In particular, you may photocopy or download these materials for your own use, but you may not reproduce them for others.

Americans with Disabilities ACT (ADA)

Policy Statement:
The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection to persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Disability Services Office, in Room B118 of Cain Hall or call 845-1637.

Academic Dishonesty

Policy Statement:
"An Aggie does not lie, cheat, or steal, or tolerate those who do." – The Aggie Honor Code
Academic misconduct, a violation of the Texas A&M Honor System, involves any of the following offenses: cheating, fabrication, falsification, multiple submissions, plagiarism, and complicity in any of these offenses. For explanations and examples of what constitutes academic dishonesty visit the Office of the Aggie Honor System at http://www.tamu.edu/aggiehonor/
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional

1. This request is submitted by the Department of Oceanography.

2. Course prefix, number and complete title of course: OCN G 205 Introduction to Ocean Studies.

3. Change requested:
   a) Prerequisite(s): From __________________________ To __________________________
   b) Withdrawal (reason) __________________________
   c) Cross-list with __________________________ Cross-listed courses require the signatures of both department heads.
   d) Change in course title and description. Enter complete current course title and current course description; complete proposed course title and proposed course description in items 4 and 5.
   e) Change in credit/contact hours. Complete item 6b. Underscore change(s). Attach a course syllabus.

4. Complete current course title and current course description: Introduction to Ocean Studies

5. Complete proposed course title and proposed course description (not to exceed 50 words):
   Topics in Oceanography

6. a) As currently in course inventory:

   Prefix | Course # | Title (exclude punctuation)
   OCN G 205 INTRO TO OCEAN STUDIES

   Lect. Lab SCH Subject Matter Content Code Admin. Unit FICE Code
   0 1 0 0 0 1 , , , , , , , , 0 0 3 6 3 2
   Do not complete shaded area.

   Level 4

   b) Changed to:

   Prefix | Course # | Title (exclude punctuation)
   OCN G 205 TOPICS IN OCEANOGRAPHY

   Lect. Lab SCH Subject Matter Content Code Admin. Unit Acad. Year FICE Code
   0 1 0 0 0 1 , , , , , , , , 0 7 - 0 8 0 0 3 6 3 2

   Approval recommended by:
   [Signature] John H. Womuth 4/20/06

   Head of Department Date
   [Signature] Vada D. Fields 4/21/06

   Chair, College Review Committee Date
   [Signature] [Signature] 4/21/06

   Head of Department (if cross-listed course) Date
   Dean of College Date

   Submitted to Coordinating Board by:
   [Signature] [Signature]

   Dean of College Date

   Effective Date 7 of 9 B

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and 2 copies •

1. This request is submitted by the Department of Oceanography

2. Course prefix, number and complete title of course: OCNG 401 Introduction to Oceanography

3. Change requested:
   a) Prerequisite(s): From ___________________________ To ___________________________
   b) Withdrawal (reason) ___________________________
   c) Cross-list with ___________________________
      Cross-listed courses require the signatures of both department heads.
       Change in course title and description. Enter complete current course title and current course description; complete proposed course title and proposed course description in items 4 and 5.
   d) Change in credit/contact hours. Complete item 6b. Underscore change(s). Attach a course syllabus.

4. Complete current course title and current course description: Introduction to Oceanography

5. Complete proposed course title and proposed course description (not to exceed 50 words): Interdisciplinary Oceanography

6. a) As currently in course inventory:

   Prefix | Course # | Title (exclude punctuation) |
   -------|----------|-----------------------------|
   OCNG | 401 | INTRO TO OCEANOGRAPHY |

   Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | FICE Code |
   -------|-----|-----|-----------------------------|-------------|-----------|
   | | | | | 0 0 3 6 3 2 |

   Do not complete shaded area.

   b) Changed to:

   Prefix | Course # | Title (exclude punctuation) |
   -------|----------|-----------------------------|
   OCNG | 401 | INTERDISCIPLINARY OCNG |

   Lect. | Lab | SCH | Subject Matter Content Code | Admin. Unit | Acad. Year | FICE Code |
   -------|-----|-----|-----------------------------|-------------|-----------|-----------|
   | | | | | | 0 0 3 6 3 2 |

   Approval recommended by:

   John W. Womack 4/20/06  Valerie P. Felke 4/21/06
   Head of Department Chain College Review Committee Date
   Head of Department (if cross-listed course) Date
   Submitted to Coordinating Board by: Date
   Dean of College
   Director of Academic Support Services Date
   Effective Date

To have this form reviewed, please send to Linda F. Lacey, Mail Stop 1265 or fax to 847-8737. 
OAR/AS-504
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and 2 copies •

1. This request is submitted by the Department of Oceanography

2. Course prefix, number and complete title of course: OCNG 430 Introduction to Geological Oceanography

3. Change requested:
   a) Prerequisite(s): From Junior or senior classification To OCNG 231 or 401 or GEOL 101 or 104 or OEEG 229; Junior or senior classification

   b) Withdrawal (reason) 

   c) Cross-list with Cross-listed courses require the signatures of both department heads.

   d) Change in course title and description. Enter complete current course title and current course description; complete proposed course title and proposed course description in items 4 and 5.

   e) Change in credit/contact hours. Complete item 6b. Underscore change(s). Attach a course syllabus.

4. Complete current course title and current course description:

5. Complete proposed course title and proposed course description (not to exceed 50 words):

6. a) As currently in course inventory:

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b) Changed to:

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Approval recommended by:

John H. Womuth 4/20/06

Head of Department Date

Chair, College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:

Dean of College Date

Director of Academic Support Services Date

Effective Date

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