

# FLORIDA ATLANTIC UNIVERSITY™

## Graduate Programs—NEW COURSE PROPOSAL<sup>1</sup>

UGPC APPROVAL \_\_\_\_\_  
 UFS APPROVAL \_\_\_\_\_  
 SCNS SUBMITTAL \_\_\_\_\_  
 CONFIRMED \_\_\_\_\_  
 BANNER POSTED \_\_\_\_\_  
 CATALOG \_\_\_\_\_

DEPARTMENT GEOSCIENCES	COLLEGE SCIENCE
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RECOMMENDED COURSE IDENTIFICATION (TO OBTAIN A COURSE NUMBER, CONTACT <a href="mailto:ERUDOLPH@FAU.EDU">ERUDOLPH@FAU.EDU</a> ) PREFIX <u>GLY</u> COURSE NUMBER <u>6938</u> LAB CODE (IF APPROPRIATE, L OR C) <u>C</u> <small>L = LAB COURSE; C = COMBINED LECTURE/LAB</small> COMPLETE COURSE TITLE: BEACH MORPHODYNAMICS OF SOUTHEAST FLORIDA	<b>EFFECTIVE DATE</b> (first term course will be offered) <b>FALL 2017</b>
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CREDITS <sup>2</sup> 3	TEXTBOOK INFORMATION NONE
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GRADING (SELECT ONLY ONE GRADING OPTION): REGULAR  SATISFACTORY/UNSATISFACTORY \_\_\_\_\_



**COURSE DESCRIPTION, NO MORE THAN THREE LINES:**  
 Fundamentals in beach morphodynamics, field-based application along the southeast Florida beaches. Emphasis on analyses of location specific beach morphology, sediment, and physical processes (hydrodynamics).

PREREQUISITES* NONE	COREQUISITES* NONE	REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL)* NONE, NONE, GRADUATE
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\* PREREQUISITES, COREQUISITES AND REGISTRATION CONTROLS WILL BE ENFORCED FOR ALL COURSE SECTIONS.

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE: PH.D.  
 MEMBER OF THE GRADUATE FACULTY OF FAU AND HAS A TERMINAL DEGREE IN THE SUBJECT AREA (OR A CLOSELY RELATED FIELD). YES

Faculty contact, email and complete phone number: Tiffany Roberts Briggs, Ph.D. <a href="mailto:briggst@fau.edu">briggst@fau.edu</a> 561-297-4669	Please consult and list departments that might be affected by the new course and attach comments. <sup>3</sup> N/A
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<b>Approved by:</b> Department Chair: <u></u> College Curriculum Chair: <u></u> College Dean: <u>Dr. Charles Roberts</u> UGPC Chair: _____ Graduate College Dean: _____ UFS President: _____ Provost: _____	<b>Date:</b> <u>8/26/2016</u> <u>10/21/16</u> <u>10/21/2016</u>	1. Syllabus must be attached; see guidelines for requirements: <a href="http://www.fau.edu/provost/files/course_syllabus.2011.pdf">www.fau.edu/provost/files/course_syllabus.2011.pdf</a> 2. Review Provost Memorandum: <b>Definition of a Credit Hour</b> <a href="http://www.fau.edu/provost/files/Definition_Credit_Hour_Memo_2012.pdf">www.fau.edu/provost/files/Definition_Credit_Hour_Memo_2012.pdf</a> 3. Consent from affected departments (attach if necessary)
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Email this form and syllabus to [UGPC@fau.edu](mailto:UGPC@fau.edu) one week before the University Graduate Programs Committee meeting.

# GLY 6938C: Beach Morphodynamics of Southeast Florida

## Spring 2016

### 3 Credits

#### General Course Information

**Term:** Spring 2016

**Course type:** Classroom + lab course (not online)

**CRN:** 31454

**Location:** SE413

**Prerequisites:** None

**Meeting Times:** Mondays, 2:00 – 4:50 pm

This is a field-based research course. Many hours will be spent either in the field or in the laboratory collecting and analyzing data, rather than meeting traditionally in the classroom.

**Textbook:** None

#### Instructor

Dr. Tiffany Roberts Briggs

Office: SE 470

Phone: (561) 297-4669

E-mail: [BRIGGST@FAU.EDU](mailto:BRIGGST@FAU.EDU)

Office Hours: Monday, 10:00 am to 1:00 pm\*

\*On “Field” days (2/08, 2/22, and 3/14), office hours will be held on the following Tuesday (i.e., 2/09, 2/23, and 3/15) from 10:00 am to 1:00 pm.

In or around SE470 (office) or SE437 (lab). *In the event that I must unexpectedly cancel office hours, I will post an announcement on Blackboard.*

#### **Note on course credit and expected workload**

FAU policy grants one semester hour of credit for every hour of (weekly) meeting time for *lecture* courses. As a general rule, students are expected to spend two hours per credit working outside of class. Work outside of this class will consist of supplemental reading, field trips, data analysis, writing assignments, and completion of other activities assigned by the instructor.

#### **Correspondence Policy:**

- For more efficient email correspondences, please include your course number in the subject line of all email correspondences ([GLY6938](#))
- For questions regarding the course schedule, grading, expectations, etc., first review the [syllabus](#) for the requested information.
  - FAU student privacy policy prohibits discussion of individual grades via email; an office visit is required.
- Please use your FAU account when emailing; otherwise an unrecognizable email account may be deemed junk or spam (and not read).
- **Under State of Florida law, all e-mails to or from FAU are public records. Do not say anything in an e-mail you would not want to see in a newspaper, etc.**

**Withdraw Policy**

Students may drop courses between January 17-23, 2016 without receiving a grade of W. A “W” grade will be entered on a student’s record for any course dropped after this date. The last date to withdraw without receiving an “F” grade for that course is April 8, 2016.

**Disability Policy Statement**

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) - in Boca Raton, SU 133 (561-297-3880); in Davie, MOD 1 (954-236-1222); in Jupiter, SR 117 (561-799- 8585); or at the Treasure Coast, CO 128 (772-873-3305) - and follow all SAS procedures. The SAS site is <http://www.fau.edu/sas/>.

**Academic Integrity (Honor Code Policy Statement)**

“Students at Florida Atlantic University are expected to maintain the highest ethical standards. Dishonesty is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. The FAU Code of Academic Integrity prohibits dishonesty and requires a faculty member, student, or staff member to notify an instructor when there is reason to believe dishonesty has occurred in a course/program requirement. The instructor must pursue any reasonable allegation, taking action where appropriate”. (FAU Regulation 4.001, code of Academic Integrity)

Further details of FAU’s Code of Academic Integrity can be found at [http://www.fau.edu/ctl/4.001\\_Code\\_of\\_Academic\\_Integrity.pdf](http://www.fau.edu/ctl/4.001_Code_of_Academic_Integrity.pdf)

Note that although many in-class activities will be collaborative and I encourage students to study together, ALL students are expected to work through all of the assignments and turn in their own work. A score of zero will be given on any assignments that are copies of each other.

**Classroom Etiquette**

University policy on the use of electronic devices states: “In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular telephones and pagers, are to be disabled in class sessions.” The only exception will be determined and announced by the instructor for special purposes as indicated.

**Attendance**

Students are expected to be present at all class meetings. Absence from class or during field work will have a negative impact on a student’s grade.

**Course Description**

Fundamentals in beach morphodynamics, field-based application along the southeast Florida beaches. Emphasis on analyses of location specific beach morphology, sediment, and physical processes (hydrodynamics).

## Course Objectives

To understand the morphology, sedimentology, and hydrodynamics of beaches, with special emphasis on southeast Florida beaches. Students will be able to:

- Identify, analyze, and interpret changes in the morphology, sedimentary characteristics, and dominant physical processes of beach environments;
- Collect, analyze, and interpret data characterizing site-specific morphodynamics;
- Apply geomorphology knowledge to southeast Florida beaches.

## Course Evaluation

This course will consist primarily of field applications in beach morphodynamics. A significant portion of the class will require time outside of the specified lecture day/time for field work and data collection (min. of three days), analysis, and interpretation. The exact dates of field work (either Friday, Saturday or Monday) will be designated and agreed upon by all members of the class at the start of the semester. Dr. Briggs' lab will provide most of the equipment necessary for collecting and processing beach morphodynamic data. On days specified as 'data', her laboratory will be available for data processing, during office hours and in lieu of an actual class meeting (or by appointment).

You will work in groups to target site-specific (time-series) morphodynamics of a beach. As a group, you will process, analyze, and interpret the data collected (30% of total grade). All class members are required to attend all three field dates and participate in all data analysis; each absence will result in 50 points deducted from the individual's *data collection & analysis* grade. As a group, you will present your results to the class (30% of total grade). All class members are required to attend both presentation dates; each absence will result in 50 points deducted from the individual's *presentation* grade. Presentation requirements are outlined in a separate document, which includes a peer evaluation component.

The term paper will consist of *either* 1) consolidation of morphodynamics of *all* groups' beaches (i.e., compare, discuss, evaluate the longshore variations in beach morphodynamics of field sites in southeast Florida); or 2) inclusion of *your own research* supplementing your groups' field survey (e.g., an individual may collect GPR data at his/her group's field site, incorporating that data into the final evaluation presented in the term paper). Individual research topics should be discussed with and approved by Dr. Briggs. Term paper requirements are outlined in a separate document.

<u>Assessment</u>	<u>Points</u>	<u>Percent</u>
Data collection & analysis	300 points	30%
Group presentation	300 points	30%
Term Paper (Individual)	400 points	40%
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TOTAL	1000 points	100%

## **Tentative Course Schedule**

A tentative course schedule is provided on the last page of this syllabus. The instructor reserves the right to make changes in the class and course schedule during the semester as necessary for the smooth functioning of the class.

This is a field-based research course. Many hours will be spent either in the field or in the laboratory collecting and analyzing data, rather than meeting traditionally in the classroom. On days specified as ‘data’, her laboratory will be available for data processing, during office hours and in lieu of an actual class meeting (or by appointment).

## **Grading**

Letter grades will be assigned based on total points as follows:

930-1000 : A	900-929 : A-	
870-899 : B <sup>+</sup>	830-869 : B	800-829 : B-
770-799 : C <sup>+</sup>	730-769 : C	700-729 : C-
670-699 : D <sup>+</sup>	630-669 : D	600-629 : D-
< 600 : F		

*No extra credit will be given.*

Grades will be posted to Blackboard. You should also keep a record of your own grades earned in this course. An incomplete or “I” grade shall ONLY be given for the reasons listed and under the conditions specified in the FAU course catalog:

(<http://www.fau.edu/academic/registrar/catalog/academics.php>).

*NOTE: No make-up/late assignments or grade disputes will be considered after the last day of classes, specified by FAU as April 25, 2016. The only exception to this will be the use of “Reading Days” in the case of emergencies or approved documentation for missing the term paper deadline in the case of an emergency.*

## **Missed Assignments**

All assignments are due on time. No late assignments will be accepted, unless accompanied by documentation for an excused absence.

## **Blackboard**

This course uses Blackboard (<http://bb.fau.edu>) as a course management system where you will find links to the course syllabus, announcements, extra reading, your grades, and other course information.

### EXAMPLE Lecture Schedule

*The instructor reserves the right to change the tentative schedule below for the smooth functioning of the course. Check Blackboard for updates and revisions.*

<u>Week</u>	<u>Date</u>	<u>Topics</u>	<u>Homework</u>
1	11-Jan	Introduction	--
2	18-Jan	<i>No Class - MLK Holiday</i>	assigned reading (see references)
3	25-Jan	<b>Beach basics: morphology, sediments &amp; processes</b>	assigned reading (see references)
4	1-Feb	<b>Application - morphodynamics</b>	assigned reading (see references)
5	8-Feb	Field	collect field data
6	15-Feb	Data Analyses	process, analyze, interpret data
7	22-Feb	Field*	collect field data
8	29-Feb	Data Analyses	process, analyze, interpret data
9	7-Mar	<i>Spring Break</i>	--
10	14-Mar	Field	collect field data
11	21-Mar	Data Analyses	process, analyze, interpret data
12	28-Mar	<i>Reserved: Backup Field/Lab; Presentation prep</i>	reserved for field work delays and data analyses; data consolidation; presentation preparation
13	4-Apr	<b>In-class presentations</b>	groups 1 & 2
14	11-Apr	<b>In-class presentations</b>	groups 3 & 4
15	18-Apr	Term paper prep	consolidation of all data; work on paper
16	25-Apr	<b>Term papers due</b>	N/A
17	2-May	Finals week	N/A

Dates shown in **bold** indicate actual classroom meeting days; all other dates are designated as individual or group work (during which time Dr. Briggs is available for consult and her lab available for use).

References (Homework):

Jan. 25:

*Beach basics: morphology, sediments, & processes*

1. Short, A.D., 1999. Beaches. In A.D. Short (Ed.), *Handbook of Beach and Shoreface Morphodynamics* (pp. 3-20). West Sussex, England: John Wiley & Sons, Ltd.
2. Komar, P.D., 1998. Beach Morphology and Sediment. In *Beach Processes and Sedimentation* (pp. 45-75). Upper Saddle River, New Jersey: Prentice Hall.
3. Boggs Jr., S., 2012. Sedimentary Textures. In. *Principles of Sedimentology and Stratigraphy* (pp. 45-64). Upper Saddle River, New Jersey: Pearson Prentice Hall.
4. Conley, D.C., 2014. Drivers: Waves and Tides. In G. Masselink and R. Gehrels (Eds.), *Coastal Environments and Global Change* (pp. 79-103). West Sussex, England: John Wiley & Sons, Ltd.

Feb. 1:

*Beach morphodynamics*

1. Bird, E., 2008. Beaches: Beach Morphodynamics and Beach States. In *Coastal Geomorphology: An Introduction* (pp. 179-181). West Sussex, England: John Wiley & Sons, Ltd.
2. Benedet, L., Finkl, C.W., and Klein, A.H.F., 2004. Morphodynamic Classification of Beaches on the Atlantic Coast of Florida: Geographical Variability of Beach Types, Beach Safety, and Coastal Hazards. *Journal of Coastal Research* SI39, 360-365.