

**BIOL 4000 PALEOLIMNOLOGY
SECTION A
SUMMER SEMESTER 2015
DEPT. OF BIOLOGY;
COLLEGE OF ARTS & SCIENCES;
VALDOSTA STATE UNIV.
CREDIT HOURS: 3**

INSTRUCTOR: Dr. Matthew Waters

OFFICE: BSC 1106

OFFICE HOURS – MTWR- 11-12

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LECTURE HOURS: MTWRF 8-10:50 BSC 1025

REQUIRED TEXT: No text required. We will use the primary literature for each topic covered usually by the person who created the technique.

COURSE DESCRIPTION: An overview of reconstructing lake environments from information acquired from sediment cores through biological, geological, and chemical techniques. **Prerequisites:** **BIOL 1107, 1108, 3200, 3250**

COURSE OBJECTIVES/EDUCATIONAL OUTCOMES:

Valdosta State University (VSU) Department of Biology graduate educatio

GRADING POLICIES/ASSESSMENT

Lecture:

A. Three (3) lecture exams will be given during the semester, including the final exam. The final exam will **not** be strictly comprehensive (as noted earlier). Each exam is worth 100 points **Make-up exams are not an automatic right;** you must notify me within **24** hours of the missed exam, and provide a **valid reason**, or you will forfeit your opportunity for a make-up. The professor is the final judge of what is an acceptable excuse. You can only make up **one** exam.

B. We will read multiple articles from the current literature. I will provide a sheet used to assess the student's reading of the papers. These sheets must be turned in at the beginning

Students with Disabilities: Students requiring special classroom accommodations or modifications because of **documented** disabilities should discuss these needs with the professor at the beginning of the semester. Disabled students not registered with the Access Office for Students with Disabilities should contact the program officer. Phone numbers are listed in the Campus Directory.

Discrimination and Sexual Harassment: No student shall engender or create an atmosphere of discrimination based on race, ethnicity, religious beliefs, gender, sexual orientation, or other factors. No student shall sexually harass any individual(s). Discrimination and/or sexual harassment will not be tolerated in the classroom or laboratory.

Plagiarism: The Biology Department policy on plagiarism can be accessed via the departmental website. It should be printed, read, and understood.

TENTATIVE LECTURE SCHEDULE AND ASSIGNED PAPERS:

Sediments and Coring

- Jon Smol Powerpoint from ASLO website (www.aslo.org)
- Fisher et al., 1992; Whitmore et al., 1996

Dating Chronologies and Models

- Appleby, 2001; Schelske et al.1994; Remier et al. 2014

Diatoms and Transfer Functions

- Smol et al. 2005, Dixit et al. 1992, Cuna et al. 2013

Nutrients and Biogeochemistry

- Schelske et al., 2010; Kenney et al., 2002; Brenner et al., 1999

Organic Matter (LOI, isotopes, Lignin, C/N)

- Meyers and Teranes, 2001; Bianchi et al., 2007; Filey et al., 2001

Photosynthetic Pigments

- Leavitt and Hodgson, 2001; Waters et al. 2010; McGowan et al. 2005

Pollen

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