

Oceanography 101: Introduction to Oceanography

AUTUMN QUARTER 2009

By staying registered in this course, you agree to abide by all of the rules and expectations provided by the instructor in this Syllabus and elsewhere, by the Bellevue College student conduct code, etc.

Instructor	Gwyneth Jones <ul style="list-style-type: none">• Bellevue College Email gwjones@bellevuecollege.edu• MSN IM / Facebook gwyneth-jones@hotmail.com
Class Sessions	Tuesdays & Thursdays, 10:30-12:20, Room S-210 <ul style="list-style-type: none">• Office Hours By appointment
Websites	The course's Blackboard Vista site. <ul style="list-style-type: none">• Also http://www.scidiv.bellevuecollege.edu/gj

Required Course Materials: New and used textbooks and field guides are often available at a discount online and at used bookstores, and from former students. Our lab manual is available only through the Bellevue College Bookstore (<http://bookstore.bellevuecollege.edu>).

- **Textbook** = Introduction to Oceanography, CUSTOM 5th edition (2008) by Tom Garrison. (Please talk with me right away if you wish to use the NON-CUSTOM 5th edition.)
- **Lab Manual** = HYBRID Oceanography 101 Lab Manual (2009) by Kent Short & Gwyn Jones. (*Autumn 2009 students will download each lab as a PDF file, print it, and bring it to class.*)
- **Field Guide** = Pacific Intertidal Life by Ron Russo and Pam Olhausen.
- **Course PPTs** = Required Course PowerPoints by Gwyneth Jones. I will post these for you to read and study, in Portable Document File (.pdf) format.
- **Other Handouts** = To be provided throughout the quarter -- via the web, by email, or in class.
- **On Reserve** = I have put books and other optional/recommended materials on reserve at the Bellevue College Library (<http://bellevuecollege.edu/lmc>) for your use. This includes at least one copy of our textbook. I have linked a number of other recommended resources to my Bellevue College webpage. Please do "peruse and use".

Also Required:

- **Reliable DAILY access to...** Computer. Printer. Email. Internet. Vista course site. MSN Messenger (IM). Dictionary. (Internet access options include: campus, home, library, friend's/family's, etc.)
- **Labs/Classwork...** Pencils (with erasers!). Calculator. Ruler. Colored pencils (not pens!).
- **Occasionally...** Graph paper. Protractor. Drawing compass. Access to Microsoft Excel.
- **Always...** Good attitude and hard work! :-)

Useful Websites:

- Many of my favorite recommended resources: <http://scidiv.bellevuecollege.edu/gj>
- Our textbook's website (Garrison) is: http://www.brookscole.com/oceanography_d
- Thurman & Trujillo textbook's site is: http://wps.prenhall.com/esm_thurman_essofocean_8
- Environmental Issues in Oceanography: http://wps.prenhall.com/esm_abel_issuessocean_2
- What other useful websites can *you* find?

Course Overview: This course will provide a general introduction to the science of oceanography. It is oriented toward non-science majors, but can also be a good starting point for those who may want to explore opportunities in marine science or earth science careers. There are 3 units: I. Geological Oceanography; II. Physical and Chemical Oceanography; and III. Biological Oceanography and Marine Environmental Issues. This section's "hybrid" course format requires a substantial amount of learning online, in addition to in the classroom. Independent work, including significant computer use, is required. Many (though not all) students find the independent, self-educational approach of this format to be as fruitful as -- and perhaps even more rewarding than -- a traditional classroom-only course. If you are a very motivated person with a history of self-

discipline and the ability to get things done without outside prompting, you are likely to succeed in this course. Furthermore, if you get easily interested in many things and are open to the world around you, this class will probably be a great experience for you.

Skills You Will Strengthen: These include independent work, group interaction, critical thinking, oral and written communication, quantitative skills, and research skills. You will learn individually from the textbook, PowerPoint files, and other sources and come to class prepared to fully participate in class discussion of the information. You will analyze information and find solutions, independently and cooperatively in small teams, via the laboratory assignments, field trips, other assignments, and discussions. You will make calculations, interpret charts and maps, and graph information. Please inform me if you are repeating Oceanography 101.

Course Schedule: The tentative course schedule is posted on the class website. Reading assignments, lab exercises, test dates, and other items are shown on the schedule. Changes, if any, will be posted to the class website, and/or announced in class or by email. If you miss a class, it is your responsibility to find out from a classmate whether any changes were announced in class! I reserve the right to alter the schedule in response to student interest, instructor discretion, and/or unforeseen circumstances.

Course Expectations and Workload: You may find that this course differs significantly from what you've experienced before. This is a 6-credit college-level laboratory-science class, in hybrid course format. Count on devoting significant intensive study for this class!

- Prior knowledge of science is not expected; curiosity, interaction, discussion, courtesy, and questions are.
- I have high expectations, and confidence in my students' abilities. In order to succeed, you need to maintain a high level of self-motivation. Good organization, time management, independence, positive attitude, self-advocacy, and study skills are essential to success in this class! Be very proactive: Keep up with assignments and readings, check the class website and your email daily, study hard, and contact your classmates and/or me when you have questions. The responsibility's on your shoulders...It's worth it -- you'll never look at the world around you in the same way again!
- You will be largely responsible for your own education; however, I am here to help you learn. I love oceanography and the related sciences, and enjoy working with students of all ages and backgrounds, so don't be shy about asking when you have questions. There are no "dumb questions". (If you're wondering about something, chances are that at least a couple of your classmates are, too!)
- I recommend that you exchange contact information (phone and/or email) with one or more classmates.

Courtesy Expectations: Students are expected to conduct all online, written, and in-person conversations in a mature, professional manner. I expect you to be courteous and respectful to me and to your classmates. Texting, IMing, etc during class is rude to everyone else in the room. You may only use a laptop during class for notetaking, with my prior permission. Emails and other communications cannot be "taken back" (though when apologies are appropriate, you should make them). So, please speak and write with care and courtesy; don't say things that you might later regret -- in terms of content, words, and tone. Even if you're thick-skinned, many of your classmates are not and they shouldn't have to be -- nor should I. A good rule of thumb: Before sending or saying something, write it up, save it, go away for an hour or more, then re-read it. I will take strong disciplinary action for improper behavior (rude, mean, discriminatory, etc); violations will be reported to the Dean of Students.

Students with Special Needs: If you have a disability for which you'll need academic adjustments, please contact me or the Bellevue College Disability Resource Center (DRC, formerly called DSS) as soon as possible to arrange for appropriate accommodations. The law states that a student may present documentation anytime and the DRC must make a good faith effort to accommodate. The DRC office is in Room B-132 at the college's main campus (telephone 425-564-2498 or TTY 425-564-4110; <http://www.bellevuecollege.edu/drc>). The DRC office will provide each eligible student with an accommodation letter, which you should review with each instructor as soon as possible, preferably during the first week of the quarter. If you're not sure whether you might qualify for course accommodations, please feel free to contact the DRC or me. To quote one of my former students: "I am very open about having a learning disability. I learned long ago that being ashamed of it means that that cycle will continue, which causes children to feel that there is something wrong with it. Just like any challenge, the individual has to decide if they want to fight for what they want or fall down in defeat. I learned late in life that I would rather fight than fall. {smile}"

For Assistance: I encourage you to ask your classmates for assistance with questions about the course material, expectations, etc and for study skills ideas or other advice, by posting a message to the appropriate Discussion Board within the course site (e.g., post to the Labs board for a lab-related question). You are also encouraged to form a study group, websurf for information, and use other resources at Bellevue College and elsewhere -- so long as everyone does their own work (do not divide it up in any way). The college provides Reading and Writing Labs, a Science Study Center and a Math Lab, and academic tutoring for many subjects (check with them as to hours). We have a library with excellent staff and resources. Feel free to ask Bellevue College staff for guidance on related resources available on campus, online, or locally. Plus, I'm here to help -- Please ask. :-). I can meet students by MSN Messenger by appointment or anytime you see me online there. And/or you may Vista-Mail me. I will try to get back to you within 48 hours (generally sooner). Please note that I have family and community obligations, and teach other classes, so I am not available "24/7". Please do let your classmates and/or me know ASAP if you're struggling in any way.

Study Tips: I've posted many of my favorite recommended resources at:

<http://www.scidiv.bellevuecollege.edu/gj> . For more study tips, feel free to talk with me or an advisor (<http://bellevuecollege.edu/resources/services>), and surf the web for information posted at other colleges' websites. Your classmates are another great source of ideas-- I encourage everyone to use the Study Strategies discussion board in the course site. If your course average is a C or less, or you are at risk for it, you may qualify for free one-on-one tutoring from the Bellevue College Academic Tutoring Center (if your average is higher, the possibilities include free group tutoring) -- Check with the center as to their hours.

Email and IM: We need to be able to reach each other outside of class time. Email and instant messaging (IM) are the easiest ways to do this. They increase our interaction potential, and decrease my response time to your questions. I will be emailing the class frequently (including on weekends sometimes), so be sure to check your account(s) DAILY (7 days a week). There are free email services (hotmail, gmail, Bellevue College, etc), and computers with email access are available on campus and at many public libraries. For IM, I use MSN Messenger, FREE from <http://www.microsoft.com/mac/default.aspx?pid=msnmessenger> (Macs) or <http://messenger.msn.com/?client=1> (PCs). So that we know we have working email addresses for each other, one of your first assignments will be to send part of your Biography assignment to me from your regular non-Vista email address. Be sure the subject line of this message (and all other emails to me this quarter!) includes:

**Oc101Hy and
YOUR INITIALS and
WHAT THE EMAIL IS ABOUT!**

If it doesn't, your message will probably be spam-filtered; I will not receive it!

Example (if your initials are RjV): *Oc101Hy RjV - Lab 1 question*

Web Work: You will need to be online DAILY (7 days a week) in our course's Blackboard Vista site (see Bellevue College Distance Education for how to access it). The course schedule is posted to our class website, which I will update frequently (and thus you must check frequently). I will post course readings, in-class agendas, PPSs and PDFs of the required PowerPoint files, hints on labs, etc to our website, and you need to be able to use Google or other search engines to find additional information related to the course material. Most of your assignments will be submitted via the course site, rather than in person. Please let your classmates and me know of any sites that you find useful and/or interesting!

Technical Issues: I am not a computer maven...If you have any technical (computer, internet, Blackboard Vista, etc) questions related to the course, please contact Bellevue College Distance Education (<http://bellevuecollege.edu/distance>) and cc: me. You are responsible for having the correct software and equipment to complete the course and to solve any local computer problems that may arise -- See the Getting Started section of the course site for course-specific requirements, in addition to the Bellevue College Distance Education Minimum Equipment and Skills page (<http://bellevuecollege.edu/distance/skills.asp>). You are also responsible for backing up your work and keeping it safe -- Digital work is easily lost due to equipment failure, accidental erasure, or other unforeseen circumstances. Such issues are up to you to resolve, and will NOT be a valid reason for an extension of a deadline. So don't wait for the last minute to do your assignments! Please have at least two "backup plans" just in case. Bellevue College has excellent computing facilities on campus, most quarters available days/nights/weekends -- Many libraries, community centers, and friends/relatives do also.

Attendance at Class Sessions: We cover a lot of material each class session. Regular attendance is required for completion of this course. I expect you to have completed all assigned readings and work, including preparing for the labs, before class. Much of our class time together will be spent discussing course concepts that were

assigned for that day and/or working on labs and other activities, some of which will be available only on the day of class. Therefore, do all your work on time or early, and do not miss class. If you will be absent, please contact me as soon as possible beforehand. You will still need to turn in all assignments on time or early (see "On-Time Policy" below), and you are responsible for everything that takes place during class time.

Classroom Behavior: I like to maintain a casual, friendly atmosphere in the classroom. As college students, you are expected to behave maturely and courteously toward the instructor and other students. Here are some of the things that I find especially disruptive, and which may adversely affect your status in the class: Talking to other students during lectures, videos, or quiet work sessions; arriving late or leaving early without prior notification to the instructor; cell phone use during class; texting or IMing; reading, writing, or typing materials not related to our current task at hand; using laptops except to take notes; rude or discriminatory words or behavior.

Grades:

Exams and quizzes	380 pts (=38%)
Labs and field trips	270 pts (=27%)
<u>Q&As, homework, discussions, and other</u>	<u>350 pts (=35%)</u>
Total	1000 pts (=100%)

(Passing [D]: 65%; Top grade [A]: 95%)

- **Conversions from % to letter grades and to GPA points:** 95-100%+ = A (4.0); 90-94% = A- (3.7); 87-89% = B+ (3.3); 83-86% = B (3.0); 80-82% = B- (2.7); 77-79% = C+ (2.3); 73-76% = C (2.0); 70-72% = C- (1.7); 68-69% = D+ (1.3); 65-67% = D (1.0); 0-64% = F (0.0).
- **Important:** It is in your own best interest to keep all graded work I return to you until final course grades are distributed. Returned work is your only proof of graded material in the event you should question your grade. Also, please keep track of your grades on an ongoing basis. If you're not sure why you got a particular grade on an assignment, it is your responsibility to first try to figure out why: Review the assignment instructions, and reread your submission with a fresh eye, in terms of both content and style. Then feel free to talk with me.
- **On-Time Policy:** All graded work must be submitted on time (or early), and will not be accepted late. Earlier is better! Plan ahead, and build in extra time "just in case". Graded work cannot be turned in late or made up except with my prior permission, for extraordinary cause (with written note from doctor or supervisor). So please don't ask for an exception unless you have exceptional cause. Assignments posted or sent incorrectly will also receive a zero. Please ask well in advance of the deadline if assignment instructions or due dates are at all unclear.

Exams and Quizzes: Each week there will be one or more tests -- a short quiz, a practice quiz, and/or a longer, more comprehensive exam. You will take those tests online, via the Vista course site. I also reserve the right to give the occasional "pop quiz" in class. Exams will not be particularly cumulative, although you will have to remember enough information from previous sections to be able to fully understand the new material. Each test may include questions relating to the PowerPoints, labs, videos, discussions, assignments, and readings from the text and elsewhere. I'll expect you to understand both "big-picture" concepts and very specific material. The tests are meant to be diagnostic tools; a good score generally means that you are keeping up with the course material. Quizzes and exams will be posted online for a period of about 3 days, and must be completed in a particular amount of time (e.g., 10 minutes maximum for quizzes, 2 hours for exams). Furthermore, they can only be opened one time, so once you start a test you must complete it at that time. It is up to you to keep track of your elapsed time -- Don't cut it close -- Penalties will be assessed for going over the time limit, even by a second or two; take electronic transmission times into account. So, even though the quizzes and exams are "open book", you will need to study for them before you view them! The tests are accessible via the "Quizzes & Exams" or "Assessments" sections of the Vista course site. Quizzes and exams will be due before midnight Saturday each week, unless otherwise noted. Late quizzes and exams will receive a zero.

Reading Assignments: In general, readings are due by the start of class each Tuesday. Bring any questions you might have about the week's readings for clarification and discussion. Before midnight that day (preferably sooner!), you will also post in our Vista course site a Q&A summary paper with at least 4 questions based on the assigned textbook, PowerPoint, lab, and other readings -- By Saturday of the week, you will post a well-researched answer to one question posted by a classmate. (Instructions are posted in the week-by-week "Assignments & Lectures" section of the course site.) Also by Saturday each week, you will take an online quiz or exam on the current course material.

Lab Assignments: Lab is a fundamental part of this course! Labs help connect book concepts with the "real world". There are about a dozen labs, so about half of our class sessions will involve a lab. You will come to class having already read, studied, and started the lab, as there will not be sufficient time to do it "from scratch" during our class period. The better prepared you are for lab, the more pleasant the experience will be (and the less time the lab will take you). Please note that some of the labs have parts that I will assign as homework: You must do those parts before the start of class (and/or, entire labs may be assigned as homework). Each lab is due at the end of the class session unless otherwise noted -- Please keep the Background Information for your own reference (just turn in the lab questions pages, stapled together, if instructed to submit individual labs). On each lab, you must show all your work (calculations, units, etc) and explain your answers fully and clearly, in pencil. You are allowed to work in small groups, but each student must compose his or her own answers (not divide up the work, nor copy anyone else's thoughts or wordings). I strongly recommend that you put your labs into a 3-ring binder. Late labs will receive a zero.

Field Trips: We're lucky to live near salty water; it can be the best "laboratory" of all! Therefore, you must attend at least one field trip (dates will be posted). We will carpool/caravan to field trips or meet at a designated location. Field trips require extra safety precautions on your part, in terms of yourself, your classmates, and equipment. Each student must return a signed Field Trip Waiver Form during the first week of the quarter. I expect full participation in the activities from each individual. No smoking. Dress appropriately to the variable local weather and tides (expect your feet -- and probably more -- to get wet). Late field trip write-ups will receive a zero.

Other Assignments: To help you learn the material, strengthen your critical thinking skills, and interact with your classmates, there will be several additional assignments during the quarter that don't fall under the categories above. Weekly "Q&As" (see above) will require you to write a summary of the assigned readings, come up with at least 4 questions you would like to know the answer to (and not covered in the readings), and post them to a Discussion Board in Vista. You will each research and present one ocean-related current event during the quarter. In-class discussions will require you to read articles, prepare for and fully participate in the discussion, and write a follow-up analysis. These and other assignments will be described during the quarter. Late work will receive a zero.

General Safety: A material we will work with that may irritate the skin is dilute hydrochloric acid. It is no more dangerous than strong household chemicals, but you should be careful and wash your hands after using it. We will also go on field trips, which require you to dress appropriately for the weather and to be careful of your own and others' safety.

Professionalism (Writing Expectations, Assistance, Honesty): Good communication skills are as important in oceanography (and other sciences) as they are in other disciplines. You have to be able to get across your ideas clearly, accurately, and completely, with sources cited. All work must be written well and submitted in a neat, professional manner. Use these Universal Intellectual Standards:

<http://www.criticalthinking.org/articles/universal-intellectual-standards.cfm> . Proofread all work carefully for typographical and spelling errors, and read it for grammar, flow, and sense! Save a copy just in case. Also, I expect all students to act with integrity. I am a trusting person, and believe most people are honest -- Please don't abuse that trust by cheating, lying, or blaming (believe me, I've seen it all). The Science Division policy on cheating is below.

Assignment Submissions and Pick-Up: Please pay careful attention to when work is due and how it should be submitted. For example...

- All labs must be in pencil (not pen!) -- Borrow one from a classmate if you forget yours.
- Do not turn in the "lab background information" when you submit your labs. I don't need it. :-)
- Some assignments are to be turned in on paper, others must be submitted via our course site.
- Typed assignments must be single-spaced, half-inch margins, and preferably double-sided. Do not use large headers or a separate cover sheet.
- Multi-page submissions (including labs) are to be stapled (no paper clips), with your name on each page.
- Computers, disks, printers, and "life" are not always reliable, so leave yourself plenty of time for troubleshooting. You are responsible for solving any computer/technical problems (see Technical Issues paragraph above).
- In some cases, you may email me an assignment, or drop it off with the Science Division secretary (in room L-200) during their regular office hours. You may not submit work by slipping it under a door!

Extra Credit: Please focus on learning the required material -- It "pays off" more than doing lots of extra credit late in the quarter. However, I have found that interacting actively with course material is a key study habit for successful students. Therefore, I offer several extra-credit options. These options are: (1) second field trip; (2) article/movie review; (3) optional lab; (4) local lecture analysis.

- You may attend a second field trip and submit the assigned report, or visit the Seattle Aquarium on your own and submit the aquarium worksheet and typed write-up per the instructions provided.
- You can earn up to 2% for writing a substantive current-events article or lecture or a movie review (weeks 3-9): Cut out a recent, substantive article of oceanographic interest (or attend a lecture or view an educational movie or TV program), and write a typed evaluation (summary & analysis) of the science content, making sure to relate it to concepts you have learned in class.
- I may also offer optional labs.
- If other opportunities arise (such as oceanography/earth science talks at UW or Pacific Science Center, etc), I may offer extra credit for participating and presenting an in-depth summary & analysis.
- NOTE: The maximum extra credit you may receive for the course is 4%. I do not allow any other type of extra credit or make-up work (this is far more generous than most instructors offer, so exceptions will not be granted). All extra credit must be done by the end of Week 9 of the quarter.

Science Division Policy on Cheating: *CHEATING IS STEALING.* You, the student, are expected to conduct yourself with integrity. If you cheat*, or aid someone else in cheating, you violate a trust. If you cheat, the following actions will be taken:

- You will receive a grade of "0" on the work (exam, assignment, lab, quiz, etc.), where the cheating occurred. This grade cannot be dropped.
- A report of the incident will be sent to the Dean of Students. The Dean may file the report in your permanent record or take further disciplinary action such as suspension or expulsion from the college. If you feel you have been unfairly accused of cheating, you may appeal. (For a description of due process, see WAC 132H-120.)
- *Cheating includes, but is not limited to, providing or copying answers on tests, labs, or other assignments; glancing at nearby tests; swapping papers; stealing, plagiarizing, and illicitly giving or receiving help on any assignment. You must each do all of your own work, and cite all of your sources. For more information on plagiarism, see the Bellevue College Writing Lab or Dean.
- Much cheating and plagiarism is unintentional, but "ignorance of the law is no defense". And, the Bellevue College Science Division policy on plagiarism and other forms of cheating is clear (see above). Therefore, I require you to read and study all of the information entitled "Avoiding Plagiarism, or How to Use Source Information Properly" at <http://www.bellevuecollege.edu/writinglab/plagiarism.html> and PRINT OUT the PDF version linked there at the top of the page (<http://www.bellevuecollege.edu/writinglab/PDFDocs/Plagiarism.pdf>). This information applies to all courses, so it's important to have handy. Please print it out and put it in a 3-ring binder or notebook for your reference. If you're at all unclear on what cheating entails (e.g., plagiarism, group work), please ask (far enough in advance to allow a reply).