**ODU Preview Fall 2015**

Steps to register for classes:
1) To login to CS computer lab
   a. CTRL+ALT+DEL
   b. Enter user ID: cspreview
   c. Enter password: preview15
   d. Make sure the domain is: CS
   **If there is any error, feel free to change machines**

2) In the browser address bar, type http://my.odu.edu to access Leo Online
   a. Login with your Midas ID and password.
   b. Click “Leoonline”

3) To register for classes:
   a. Click on “Admission, Registration, Student Records,…”
   b. Click on “Registration”
   c. Click on “Banner XE Registration”
   d. Click on “Register for Classes”
   e. Click “Select Term” – It should be set as “Fall 2015” – Click “Continue”

4) To search for a class:
   a. Enter search criteria
      a) You can search for one or more subjects
      b) You can search by the course number
      c) You can search for a keyword
      d) You can search using the advanced options, such as day of the week, time, campus, instructor, and more

**Tip: To directly search for one class**
Advanced Search > Subject and Course Number

   b. Repeat the previous steps until you are registered for all of your desired/required classes.

5) Classes to register for today:
   a. CS 150 (Lecture, Lab, and Recitation) if placed in Math 162 or higher
   b. Math (Based on SAT scores or Compass test scores)
   c. English (Based on WSPT Score, incoming credits, etc.)
   d. General Education

6) Before you leave:
   a. Ask me to confirm you are registered for all required courses

*A note about Math placement*
MATH 102M. College Algebra. 3 Credits.
A basic course in algebra that emphasizes applications and problem-solving skills. Topics include properties of the real numbers, graphing of equations and inequalities, the algebra of rational expressions, and properties of exponentials and logarithms. This course fulfills the math general education requirement and can be used as a preparation for MATH 162M. MATH 101M is not a prerequisite for MATH 102M. Not open to students with credit for MATH 162M.

MATH 103M. College Algebra with Supplemental Instruction. 3 Credits.
This course covers the same content as MATH 102M. It is designed for students who must complete MATH 102M as part of their degree program, but who do not meet the prerequisites for MATH 102M (Math SAT greater than 450 and High School GPA of 3.0 or greater). MATH 103M may be used interchangeably with MATH 102M and may be used as a prerequisite requirement for any course that requires MATH 102M as a prerequisite. MATH 103M will require registration for a supplemental instruction session each week. Prerequisites: Math SAT less than or equal to 450, OR, High School GPA less than 3.0.

If you are placed into Math 102 or 103, you may not take CS 150.

If you did not do well on the Math SAT, and have already taken above College Algebra in high school, you consider taking the Compass Math Placement Test.

The Compass Math Placement Test is offered at 3pm following any preview.

To sign up visit this link:
http://uc.odu.edu/elt/testing/placement/compass_registrationform.php

*Note: COMPASS Math Placement Test is used for placement into a math course at ODU, therefore, once a student has enrolled/completed any math course at ODU they are not eligible to take the COMPASS Math Placement Test.

*A note about English Placement
All Students, including transfer students, must take the Writing Sample Placement Test

To get more information on the WSPT visit this link:
http://uc.odu.edu/writingcenter/facts/writingplacement.shtml

If you get a 1 you must take UNIV 150

If you get a 3 you can take ENGL 110C
Welcome, from Your Advisor

Welcome to Old Dominion University!

We are so glad that you have chosen to attend to ODU. As Chief Departmental Advisor of the Computer Science Department, I would like to provide some highlights of our program and the extra benefits we provide for our students.

We are located in two buildings on campus; the LEEDS certified, Williams Engineering and Computational Sciences building, and newly renovated Dragas Hall. In addition to being environmentally friendly, the Williams building was designed to support and foster research efforts within our department and across disciplines. Stop by for a tour and to watch presentations shown in the lobby via floor-to-ceiling displays. This building houses our faculty offices, research laboratories, and student labs.

Our teaching labs and open student labs are located in Dragas Hall just off Hampton Blvd. Dragas also has meeting rooms for students working on group projects, a student activities office, and a peer advising office. The classrooms are networked and equipped with projectors for multimedia instruction. In the student labs, you will find over 100 networked Windows computers with access to Unix servers! Our computing facilities are run and maintained by undergraduate students in the program creating an interesting and beneficial job opportunity for CS majors.

The computer science program is mathematically and scientifically oriented, providing students with a comprehensive background that prepares them for a wide range of job opportunities ranging from systems oversight and software engineering to database development and network administration. Our program emphasizes problem-solving skills so that students can quickly become productive in any domain area of employment. The freshman introductory course provides you with career and academic information critical for new students. Industry professionals and university researchers will help you explore the kinds of work available after graduation. You will also hear from university staff concerning learning strategies, academic tools, and employment opportunities.

The senior year capstone course sequence focuses on broad context within which computer scientists typically work. You will gain experience in many skills not ordinarily taught in computer science curricula: technical research, market research, presentation skills, group collaboration, interviews, budgeting, presentation tools, scheduling, hardware availability research, system architectural design, requirements specification, simulation, prototyping, and cost estimation. Students will also prepare descriptive documents, specification/requirements documents, test plans, and user manuals. Feedback from our students, potential employers, and an external board of advisors confirms that our students are more successful upon employment as a result of this unique experience.

All CS students are able to participate in industry supported internships and department sponsored research projects. These opportunities provide a competitive benefit in job searches and potential graduate study. Computer Science jobs rank in top 3 for job growth and salary potential nationally. We provide the opportunity for students to accelerate into graduate study in CS or an MBA while completing their undergraduate degree.

Please contact me if I can answer any questions, or if you are interested in a tour of our facilities. And again, welcome to ODU, and we hope you enjoy Computer Science as your major.

Sincerely,

Janet Brunelle
The Bachelor of Computer Science requires the successful completion of a minimum of 120 semester credits in the areas listed below. The computer science and math requirements have been chosen to provide exposure, balance and competence in concepts as well as in chosen applications.

**Computer Science Required Courses** (46 credits) - A grade of C (2.0) or better is required for each class listed in the List of required courses beginning with the 2000 catalog.

- **CS 150** - Introduction to Programming
- **CS 170** - Fundamentals of Computer Organization
- **CS 250** - Problem Solving and Programming
- **CS 252** - Introduction to Unix for Programmers
- **CS 270** - Introduction to Computer Architecture
- **CS 300T** - Computers in Society
- **CS 330** - Object Oriented Programming Design
- **CS 350** - Introduction to Software Engineering
- **CS 355** - Principles of Programming Languages
- **CS 361** - Advanced Data Structures and Algorithms
- **CS 381** - Introduction to Discrete Structures
- **CS 390** - Introduction to Theoretical Computer Science
- **CS 410** - Professional Workforce Development I - Capstone course
- **CS 411W** - Professional Workforce Development II Capstone Course
- **CS 312** - Computational Methods and Software
- **CS 471** - Operating Systems

- **Computer Science Electives** (9 credits)

  Three CS 400-level electives. Up to six credits of work experience (CS 367 or 368) may be used here also.

  - **Database:**
    - **CS 450** - Database Concepts
    - **CS 456** - Database Administration I*  
    - **CS 457** - Database Administration II*
  
  - **Network:**
    - **CS 454** - Network Management
    - **CS 455** - Introduction to Networks and Communications
    - **CS 458** - Unix System Administration
    - **CS 472** - Network and Security
    - **CS 486** - Introduction to Parallel Computing *  
    - **CS 487** - Applied Parallel Computing
  
  - **Systems:**
    - **CS 476** - Systems Programming
    - **CS 454** - Network Management
    - **CS 488** - Principles of Compiler Construction
  
  - **Web Programming:**
    - **CS 312** - Internet Concepts
    - **CS 419** - Web Programming
    - **CS 431** - Web Server Design
    - **CS 441** - App Development for Smart Devices
  
  - **Game Development:**
    - **CS 460** - Computer Graphics
    - **CS 475** - Introduction to Computer Simulation*  
    - **CS 480** - Introduction to Artificial Intelligence*
  
  - **Cybersecurity:**
    - **CS 462** - Cybersecurity Fundamentals
    - **CS 463** - Cryptography for Cybersecurity
- **CS 464** - Networked Systems Security
- **CS 465** - Information Assurance

  - Misc:
    - **CS 451** - Software Engineering Survey

  - **Technology Initiative Tracks**
    - ORACLE Academic Initiative (OAI)
    - Cisco Initiative
    - Solaris Initiative

  - **Mathematics/Statistics (14 credits)**
    - MATH 211 and 212 - Calculus I & II
    - MATH 316 - Linear Algebra
    - STAT 330 - Introduction to Statistics

**Note:** CS 381, 390, and 417 are fundamentally mathematics courses

- **Technical Electives (6 credits)**
  Designed to broaden the student's technical background in quantitative methods. Courses may be chosen from "N" science courses or from Accounting 201 and 202. Also courses taken in an approved minor may be used here with departmental approval.

- **General Education** -- See appropriate catalog.

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**Additional Requirements**

- Students must achieve a minimum grade of a C in any CS course used as a prerequisite to another CS course.
- Students under the 2010-2012 catalog must achieve a C or better in all CS courses and all CS prerequisite courses.
- Students under the 2010-2012 catalog must pass the exit exam in order to graduate.
- Students must successfully complete a minimum of 120 credits including transfer credits with a minimum grade point average of 2.0 both overall and in the major.
- Students must achieve a passing grade on the exit exam of writing proficiency.
- Students must participate in and pass the University Senior Assessment Test.
- Students must participate in the Departmental Senior Assessment Test.
- Students must formally apply for graduation with the Registrar by the published deadline.
Bachelor of Science in Computer Science
Worksheet for CATALOG YEAR: 2015-16

NAME:__________________________________ Student ID:_____________________
Exit Exams: CS____, ODU____ Total Credit Hours ______ (minimum 120) ____

CS Required Courses (48 credits, C or better required in each course)

150 ______ 250 ______ 252 ______ 361 ______ 330 ______
170 ______ 270 ______ 471 ______ 350 ______ 410 ______ 411W ______
300T ______ 381 ______ 390 ______ 355 ______ 417 ______

CS Electives (9 credits)
Up to six of these credits may be satisfied by work experience such as CS 367 and 368. The remainder must be selected from CS 418, 431, 441, 450, 451, 454, 455, 456, 457, 458, 460, 462, 463, 464, 465, 472, 475, 476, 480, 486, 487, and 488.

Math (14)
(CS 381, 390, and 417 are fundamentally mathematics courses)

Calculus (8): Math 211 ______ Math 212 ______

Technical Electives (6-8)
Select from upper-level U classes or lower-level N classes in BIOL, CHEM, GEOL, OCEN, or PHYS excluding BIOL 105N-106N, 110N, 111N, 112N, 113N, 117N, 118N and PHYS 103N-104N You may also choose Acct 201 and 202. Substitutions must be approved by the Chief Departmental Advisor.

University Degree Requirements

Upper Division (6 or more) or (Minor, 2nd Major, or Two courses 300 level or higher outside of the COS):
Option D:

Lower Division:
Composition (6): Engl 110C , Engl 211C or 231C (preferred): ______ , ______
Oral Communication (3): COMM 101R: ______
Literature (3): Engl 112L, 114L or Flet 100L ______
Human Creativity (3): Arth 121A, Arts 122A, Comm/Thea 270A, Musc264A, Dance 185A or Thea 241A ______

Information Literacy & Research: CS 121G ______
Philosophy and Ethics (3): Phil 110P, Phil 120P, Phil 140P, Phil 230E, Phil 250E, Phil 303E, Phil 344E, Phil 345E, Phil 442E ______
Natural Science (8): Select a full year from: Biol 121N/122N, 123N/124N or Chem 105/106N, 107/108N or Chem 121/122N, 123/124N or Oeas 106N, 107N or Oeas 110N or 111N,112N or Phys 101N, 102N or Phys 111N, 112N or Phys 231N, 232N ______
Foreign Language (0-6):

1 CS 333 may be substituted for CS 150 and 250.
2 CS 334 may be substituted for CS 170 and 270.
3 Students with 3 years of one language or 2 years of two languages in high school are exempt. The Admissions Office will determine the exemption status based upon students’ High School transcript.
Prerequisite Structure 2015 Catalog

Math (14 credits)
- M102
- M162
- M163
- Stat330
- M316
- M163
- M211
- M212

CS Required Courses
- M102
- 150
- 250
- 252
- 270
- 330
- 331
- 334
- 381
- 390
- 471

CS Electives (9 credits)
- Stat330
- 455
- 454
- 330
- 361
- 381
- 450
- 456
- 471
- 457

DBA Track = Database Administration with Oracle Software
NDA Track = Network Design and Administration