CS 1314
Introduction to Programming and Problem Solving

Instructor
Dr. Erdogan Dogdu
E-mail: edogdu@angelo.edu
Phone: 325-486-5444
Office: MCS 205A
Class Time: Online Collaborate Sessions, M-F 11:00am-12:00pm
Office Hours: M-F 3:00pm – 5:00pm or by appointment (on Blackboard Collaborate)

Course Information

Course Description
Basic competency in computer programming, ability to solve problems by writing computer programs, knowledge of the Python language and an introductory knowledge of object-oriented programming.

Prerequisite Courses
None

Course Goals
The goal of this course is to master the basics of computer programming and solving problems using Python programming language.

Student Learning Outcomes
When you complete this course, you should be able to:

- Read and write basic Python programs
- Recognize and use some of the many Python libraries
- Analyze basic problems and write a Python program to provide a solution
- Progress to the next level with the Python language

Course Delivery
This is an online course with learning resources and supplemental materials posted in Blackboard1.

Required Text and Materials
Required:

- How to Think Like a Computer Scientist – Interactive Edition by Brad Miller and David Ranum
  https://runestone.academy/runestone/books/published/thinkcspy/index.html#
  Course ID: Learn_Python_ASU
  This textbook is an Open Educational Resource (OER), it is online and free to use.
Other Optional OER:
• **Python for Everybody** by Charles Severance
  o [https://books.trinket.io/pfe/](https://books.trinket.io/pfe/) or [https://www.py4e.com/lessons](https://www.py4e.com/lessons)
• **Think Python 2e** by Allen B. Downey [https://greenteapress.com/wp/think-python-2e/](https://greenteapress.com/wp/think-python-2e/)
• **How to Think Like a Computer Scientist** by P. Wentworth, J. Elkner, A. B. Downey, C. Meyers [http://openbookproject.net/thinkcs/python/english3e/](http://openbookproject.net/thinkcs/python/english3e/)
• **Python 3 Tutorial** [https://www.python-course.eu/python3_course.php](https://www.python-course.eu/python3_course.php)

**Technology Requirements**
You do not need anything beyond the open textbooks and a computer to complete the course. You need to complete quizzes, assignments, and exams. You can use computers in ASU computer labs but it will almost certainly be helpful to have a computer that you can use of your own. Python and its related tools are available on the Windows, Mac, and Linux operating systems and thus everybody that has a computer outside of class should be able to practice with their own Python installation on it.

**Software: Python**
• Available on the machines in the MCS computer labs.
• You can [download²](https://www.python-course.eu/python3_course.php) Python free of cost. Details will follow in class.

**Blackboard:** You are required to follow the posts and study all material posted on Blackboard.
**Computer:** You must have access to an adequate computer and Internet connectivity to participate fully in the class. A table describing supported browsers can be viewed on [Blackboard’s support site³](https://www.python-course.eu/python3_course.php).

**Communication**
You are responsible for checking your ASU email account and Blackboard throughout the duration of this course.

I will generally respond to email and/or telephone messages within 24 hours during working hours Monday through Saturday. However, weekend messages may not be returned until Monday.

Written communication via email: All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line in the form of “[CS1314] subject matter”.

Virtual communication: Office hours and/or advising may be done with the assistance of the telephone, Collaborate, Skype, etc.

**Grading**

**Evaluation and Grades**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Assignments</td>
<td>35%</td>
</tr>
<tr>
<td>Midterm exam 1</td>
<td>15%</td>
</tr>
<tr>
<td>Midterm exam 2</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
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</tbody>
</table>
ASU employs a letter grade system. Grades in this course are determined on a percentage scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 – 100</td>
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<tr>
<td>B</td>
<td>80 – 89</td>
</tr>
<tr>
<td>C</td>
<td>70 – 79</td>
</tr>
<tr>
<td>D</td>
<td>60 – 69</td>
</tr>
<tr>
<td>F</td>
<td>0 - 59</td>
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</tbody>
</table>

Assignment and Activity Descriptions

Quizzes – You will have the ability to complete a quiz possibly each Friday, on the topics that we have covered during the week. I expect you to be in class to complete these quizzes.

Assignments – You will have the opportunity to complete an assignment each week. I will make the assignment available during the week and you’ll have until the end of the next week (Friday) to submit it – I will normally grade the assignments on the Saturday after they are due.

Exams will be completed during the normal class time, except for the final exam which will have an extra hour in case you need it – you probably won’t need the extra hour for the final.

With respect to late work, it deserves a zero. However, depending on the circumstances, I reserve the right to give more than a zero.

Course Schedule

Weekly tentative schedule (subject to change):

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>June 1</td>
<td>Ch.1. Introduction</td>
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<tr>
<td></td>
<td>June 2-3</td>
<td>Ch.2. Variables, Expressions, Assignments, Operators, Operands, Input</td>
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<td></td>
<td>June 4-5</td>
<td>Ch.3. Debugging; Ch.4. Turtle Graphics</td>
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<tr>
<td>2</td>
<td>June 8</td>
<td>Ch.4. Iterations</td>
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<td></td>
<td>June 9</td>
<td>Ch.5. Modules</td>
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<td></td>
<td>June 10</td>
<td>Ch.6. Functions</td>
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<tr>
<td></td>
<td>June 11</td>
<td>Ch.7. Selection</td>
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<tr>
<td></td>
<td>June 12</td>
<td><strong>Midterm 1</strong></td>
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<tr>
<td>3</td>
<td>June 15</td>
<td>Ch.8. More iterations</td>
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<tr>
<td></td>
<td>June 16</td>
<td>Ch.9. Strings</td>
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<td></td>
<td>June 17</td>
<td>Ch.10. Lists and Tuples</td>
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<td></td>
<td>June 18</td>
<td>Ch.11. Files</td>
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<td></td>
<td>June 19</td>
<td><strong>Midterm 2</strong></td>
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<tr>
<td>4</td>
<td>June 22</td>
<td>Ch.12. Dictionaries and Sets</td>
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<td>June 23</td>
<td>Ch.13. Exceptions</td>
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<td>June 24</td>
<td>Ch.16. Recursion</td>
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<td></td>
<td>June 25</td>
<td>Ch.17. Objects and Classes</td>
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<td>June 26</td>
<td>Data Visualization</td>
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<tr>
<td>5</td>
<td>June 29-30</td>
<td>Review – Problem Solving</td>
</tr>
<tr>
<td></td>
<td>July 1</td>
<td><strong>Final Exam</strong></td>
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</tbody>
</table>
General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject to disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university’s Statement of Academic Integrity.

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU’s Academic Integrity policy in the Student Handbook. Plagiarism is the action or practice of taking someone else’s work, idea, etc., and passing it off as one’s own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the ASU Writing Center.
Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day\textsuperscript{11} for more information.

Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit www.angelo.edu/title-ix.

\textsuperscript{1} https://blackboard.angelo.edu
\textsuperscript{2} https://www.python.org/downloads/
\textsuperscript{3} https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support
\textsuperscript{4} https://www.angelo.edu/student-handbook/
\textsuperscript{5} https://www.angelo.edu/catalogs/
\textsuperscript{6} https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php
\textsuperscript{7} https://www.angelo.edu/services/disability-services/
\textsuperscript{8} https://www.angelo.edu/content/files/14197-op-1011-grading-procedures
\textsuperscript{9} https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php
\textsuperscript{10} https://www.angelo.edu/dept/writing_center/academic_honesty.php
\textsuperscript{11} https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of