

I decided to screen shot the syllabus to save paper. Please let me know if this is an issue.

#### **IX. PROHIBITED CONDUCT**

A. Academic Integrity violations, including:

1. *Cheating*: Using unauthorized assistance, materials, study aids, or other information in any academic exercise (Examples of cheating include, but are not limited to, the following: using unapproved resources or assistance to complete an assignment, paper, project, quiz or exam; collaborating in violation of a faculty member's instructions; and submitting the same, or substantially the same, paper to more than one course for academic credit without first obtaining the approval of faculty).

#### **11.3 Special Needs**

Old Dominion University is committed to achieving equal educational opportunity and full participation for persons with disabilities. It is the university's policy that no qualified person be excluded from participation in any university program or activity, be denied the benefits of any university program or activity, or otherwise be subjected to discrimination with regard to any university program or activity. This policy derives from the university's commitment to non-discrimination for all persons in employment, access to facilities, student programs, activities and services. You may view the policy online: Old Dominion University Policies and Procedures 4500 - Accommodation of Students with Disabilities (pdf). For additional information visit the Office of Educational Accessibility online or at 1525 Webb Center.

#### **11.4 University Email Policy**

The Old Dominion University e-mail system is the official electronic mail system for distributing course-related Communications, policies, Announcements and other information. In addition, the University e-mail user ID and password are necessary for authentication and access to numerous electronic resources (online courses, faculty Web pages, etc.) For more information about the policy, please visit: Electronic Messaging Policy for Official University Community Policy 3506 (pdf). For more information about student email, please visit <http://occs.odu.edu/accounts/studemail/>

#### **11.5 Withdrawal**

A syllabus constitutes an agreement between the student and the course instructor about course requirements. Participation in this course indicates your acceptance of its teaching focus, requirements, and policies. Please review the syllabus and the course requirements as soon as possible. If you believe that the nature of this course does not meet your interests, needs or expectations, if you are not prepared for the amount of work involved - or if you anticipate that the class meetings, assignment deadlines or abiding by the course policies will constitute an unacceptable hardship for you - you should drop the class by the drop/add deadline, which is located in the ODU Schedule of Classes. For more information, please visit the Office of the University Registrar.

#### **12. Student Help Resources**

12.1 Online Student Orientation: <http://www.clt.odu.edu/oso>

12.2 Blackboard Support Website: <http://www.clt.odu.edu/bb>

12.3 Technical Support Center: <http://occs.odu.edu/>, [occs-help@odu.edu](mailto:occs-help@odu.edu), 757-683-3192

12.4 Study Guides Strategies: <http://www.studygs.net/>

12.5 Papers Citation Styles: MLA, APA, Chicago & CBE:

<http://www.dianahacker.com/resdoc>

#### **12.6 Student Acknowledgement**

I, Carter F., have completely read this syllabus and understand and agree to the course requirements.

  
Signature

MET 440

HW 1.1

Carter Fishback

7.  $Q_x = kA \left( \frac{T_1 - T_2}{x_1 - x_2} \right) = kA \left( \frac{\Delta T}{L} \right)$

$L = .05 \text{ m}$

$k = .8 \text{ W/m} \cdot \text{C}^\circ$

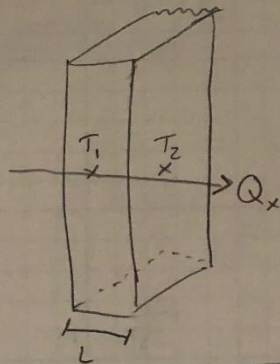
$T_1 = 30^\circ$

$T_2 = 20^\circ$

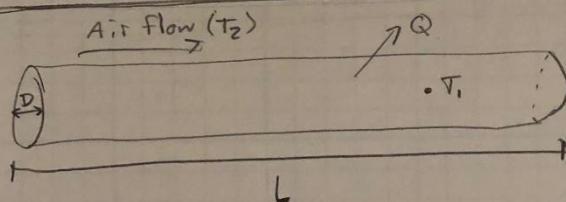
$A = 1 \text{ m}^2$

$Q_x = (.8 \text{ W/m} \cdot \text{C}^\circ)(1 \text{ m}^2) \left( \frac{30 - 20}{.05} \right)$

$Q_x = 160 \text{ W} = 1.6 \text{ kW}$



16.



$A = DL =$

$L = 5 \text{ m}$

$D = .02 \text{ m}$

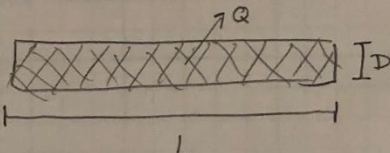
$T_1 = 110^\circ \text{C}$

$T_2 = 10^\circ \text{C}$

$h = 100 \text{ W/(m}^2 \cdot \text{C}^\circ)$

$Q = hA\Delta T$

From side:



$Q = 100 [5(.02)] (110 - 10) = 1000 \text{ W} = Q$

25.

$q_{\text{absorbed}} = \alpha q_{\text{incident}}$

$q_{\text{incident}} = 1000 \text{ W/m}^2$

$\alpha = .8$

$q_{\text{absorbed}} = .8(1000 \text{ W/m}^2) = 800 \text{ W/m}^2$

$A = 4 \text{ m}^2$

$q_{\text{surface}} = (800 \text{ W/m}^2)(4 \text{ m}^2) = 3200 \text{ W} = 3200 \text{ J/s} \left( \frac{3600 \text{ s}}{1 \text{ hr}} \right) = 11520000 \text{ J/h}$

$q_{\text{surf}} = 11520000 \text{ J/h} (2 \text{ hr}) = 23040000 \text{ J} = 23.04 \text{ MJ} = q_{\text{surf}}$

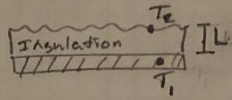
MET440

HW1.1

Carter Fishback

29.

•  $T_{air}$



$$L = .1m$$

$$T_1 = 150^\circ C$$

$$T_2 = 75^\circ C$$

$$T_{air} = 15^\circ C$$

$$k_{ins} = 1 W/m \cdot ^\circ C$$

1. Calculate  $\epsilon$  of the insulation

2. Calculate  $\epsilon$  from inside to outside

3.

