2019 **CORE**
Antimicrobial Stewardship
CURRICULUM

Self Study Roadmap

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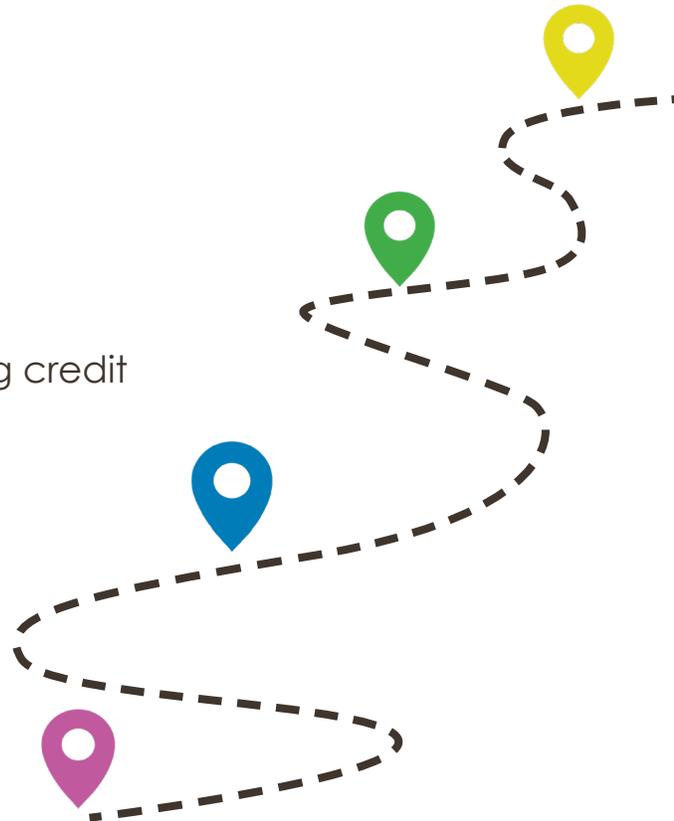- Section 4: AS Program Logistics

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Background:

The IDSA Core Antimicrobial Stewardship (CAS) Curriculum was developed to provide infectious diseases (ID) fellows with foundational education and training in antimicrobial stewardship (AS), regardless of ultimate career plans. The curriculum was designed for use within an existing ID fellowship training program in response to a needs assessment of ID Training Program Directors and to ensure the future ID workforce is equipped to oversee and participate in AS efforts.

While the curriculum was designed for adult ID fellows, other learners (e.g. pediatric ID fellows, ID pharmacy residents, practicing ID physicians and pharmacists, medicine residents, and Advanced Practice Providers) desiring education and training in AS will benefit from curricular materials and may adapt them to their own needs.

NOTE: Learners are referred to as "stewards-in-training" throughout the curriculum.

CAS Curriculum Learning Objectives:

Upon completion of the CAS Curriculum, you will be able to:

1. Explain to patients and health care providers the importance of antibiotic stewardship in the care of individual patients and the community at large

2. Model antibiotic stewardship best practices during the clinical care of patients in the inpatient and outpatient setting

3. Structure a conversation to effect change in the antibiotic prescribing patterns of other providers using techniques based in behavioral psychology

4. Describe elements of an effective antibiotic stewardship program and explain the inter-professional collaborations and leadership support necessary for its success

5. Discuss antibiotic stewardship as a potential career pathway and explain the day-to-day activities of the antibiotic steward

Time Commitment:

The amount of time that you will need to complete each section will vary, but approximately 45 min -1 hour should be allocated for section 1, 90 min - 2 hours for section 2, 1 - 2 hours for section 3, and 4 -5 hours for section 4. Optional enrichment exercises such as the clinical teaching tool and evaluation tools can be readily incorporated into the clinical setting in 5-10 minute increments. Additional time may be necessary for you to read background information and resources if you are unfamiliar with certain concepts or if you would like to explore a given topic in more depth.

Curriculum Components:

Four Main Sections:

The CAS Curriculum is comprised of four main sections:

- Section 1: An Introduction to AS
- Section 2: AS in Everyday Practice
- Section 3: Educating and Coaching on AS, and
- Section 4: AS Program Logistics

Section 1: An Introduction to AS, should be completed first. The other sections can be completed in an order and interval that best fits your needs.

Application and Reinforcement Tools:

Concepts that were covered in the CAS curriculum can be reinforced using distinct components of the curriculum such as the core concepts handout, five clinical "pearls" pocket cards, and additional reading/resources.

The AS Clinical Teaching Tool can be used to apply and reinforce AS principles into everyday clinical practice. In Section 3, you will find a "NARROWS" pocket card that can provide you with communication strategies to positively influence the prescribing habits of others in the clinical setting.

Evaluation tools:

Assessments and knowledge checks are embedded in each section. The AS Clinical Teaching Tool reinforces principles of AS in everyday practice and can be used to research and gather formative feedback.

CAS Curriculum Implementation:

You must complete a brief survey through the Learning Management System before starting this self-guided curriculum.

Upon enrollment, you will have access to **ALL** eLearning components of the curriculum. For each section, there is an eLearning option for each module where your progress through the curriculum will be tracked automatically.

For AS curriculum technical support, please e-mail academy@idsociety.org

Notes:

Section 1: Introduction to Antimicrobial Stewardship

Upon completion of this section, you will be able to:

- Define antimicrobial stewardship, its programmatic goals, and key strategies to achieve the goals
- Relate trends and patterns between antimicrobial use and resistance
- Recognize adverse events associated with the use of specific antimicrobials, including the risk for development of C. difficile infections
- Describe the role of clinical and laboratory diagnostic tools in improving antimicrobial use
- Define expected outcomes of an ASP

Content in this section is available through (3) eLearning modules. The 3 modules include:

Module 1: An introduction to Antimicrobial Stewardship
Module 2: A Brief Overview of the side effects of antibiotics
Module 3: The Essential Role of the Clinical Lab & Diagnostic Tools

There is a handout highlighting core AS concepts that are introduced in this section. Knowledge check questions embedded in the eLearnings provide a mechanism to assess understanding of concepts.

Section 2. Antimicrobial Stewardship in Everyday Practice

Upon completion of this section, you will be able to:

• Judge when to recommend formal ID consultation or AS intervention
• Recognize the major "infectious diseases syndromes" where antimicrobials are over- and misused in acute care inpatient and outpatient settings, and the stewardship techniques to improve prescribing for these infections
• Identify common process and outcome measures/metrics
• Compare and contrast effective AS techniques in the inpatient vs. outpatient settings

Content in this section is available through (5) case-based eLearning modules. The 5 modules include:

AS in Everyday Practice: A Clinic Visit Case
AS in Everyday Practice: The Antibiotic Approval Request Case
AS in Everyday Practice: The Curbside Call Case
AS in Everyday Practice: The Prospective Audit and Feedback Cas
AS in Everyday Practice: The Rapid Diagnostic Dilemma Case

The cases are based on common ID clinical scenarios and highlight specific AS practices in routine clinical care. Each of the 5 cases has formative questions embedded in the case, suggestions for applying concepts, and a "clinical pearls" pocket card for reference.

If faculty/mentor resources are available at or near a neighboring institution, you are encouraged to complete at least 3 AS debriefing activities during routine patient care using the AS Clinical Teaching Tool.

Section 3. Educating and Coaching on Antimicrobial Stewardship

Upon completion of this section, you will be able to:

- Explain key behavioral psychology concepts that influence antimicrobial prescribing
- Propose effective techniques to change antimicrobial prescribing practices
- Use provider education techniques to effect change in antimicrobial prescribing
- Demonstrate communication skills to influence antimicrobial prescribing habits of others

Content in this section is available through 3 communication skills scenario eLearnings. Ideally, before starting this section, you will read a brief primer on AS-related communication skills and behavioral psychology.

The 3 modules include:

Scenario 1: Deference to Seniority
Scenario 2: Overly Broad Empiricism
Scenario 3: De-escalation and the Outlier Prescriber

This section contains a NARROWS mnemonic and reference pocket card to help you remember AS communication skills to positively influence the prescribing habits of others.

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Section 4. Antimicrobial Stewardship Program Logistics

Upon completion of this section, you will be able to:

• Describe key steps in establishing an ASP
• Identify multidisciplinary collaborations necessary for the success of an ASP
• Describe how to implement the core elements of ASPs into practice
• Recognize regulatory and reporting aspects of ASPs
• Describe AS quality improvement and patient safety activities
• Recommend strategies for responding to antimicrobial shortages

Content in this section is available through 2 activities.

The first activity is an antibiotic shortage simulation exercise entitled:
Shortage Mitigation of Antibiotics in Real Time (SMART).

The second activity in this section is the:
Reflective Observation, Brief Interview, and Notation (ROBIN) exercise.

SMART Exercise Preparation:

You should prepare for the shortage exercise by researching the SMART preparation questions. You can access the questions and read a brief primer on the activity via the SMART Exercise preparation eLearning module. Next, if there are resources available, you can work through the exercise with faculty or you can watch and listen to the new "SMARTcast" eLearning simulation.

New to the 2019 CAS Curriculum:
At **ID**Week 2018, several ID leaders in antimicrobial stewardship along with several "stewards in- training", conducted the SMART Exercise in person. This activity, captured through video and audio, is now available for fellows/trainees to review on their own.

ROBIN Exercise Preparation:

For this component of the curriculum, you will prepare for the exercise with a brief primer on medical staff governance and activity instructions using the eLearning module. With faculty/mentor resources available at or near a neighboring institution , plan to either attend 2 leadership activities (such as AS or Infection Prevention meetings) or interview 2 medical staff leaders. You will then prepare a one-page write up giving your impressions.

If you do not have these resources available to you, please e-mail academy@idsociety.org for additional arrangements.

Accessing the Learning Management System:

You can access the curriculum by logging into the address below:
**https://academy.idsociety.org/**

To access the curriculum within the LMS, you must create an account if one does not already exist. If you already have an existing login for your IDSA membership account, you can login with those same credentials.

Accessing the Curriculum:

If you have access to this guide, by now you should have completed the purchase process, granting you access to the course.

Note: Each user will also receive e-mail confirmation about enrollment to the course and can use the links within the e-mail to access the course as well.

To begin, start by clicking "My Account" and then "My Courses".
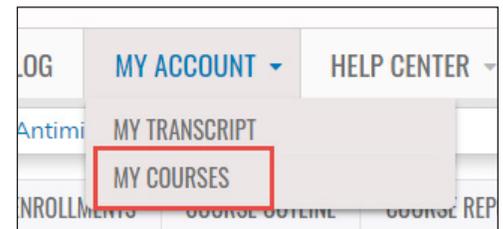
You should then see another set of tabs below. Initially, you will find the courses under "Pending activities". After completion, you can find and reference them under "Completed activities".

You must start by completing "Section 1 - Introduction to Antimicrobial Stewardship" first.

Section/Module Navigation

Start by clicking on the Section of your choice.

You will arrive at the course landing page that will provide you with learning objectives, and additional information related to the section.

When you are ready to get started, click "Take Course"

You will then enter the section and can begin further navigation through the left hand side.

Click the circle you would like to display and then click "Start"

In the window to the left, next click "Launch" to open eLearning (it will display in a new window)

Note: At the bottom of the left hand navigation, you will find all of the links and reference information for the entire section.
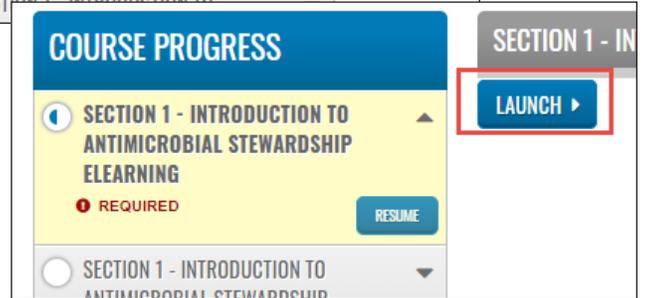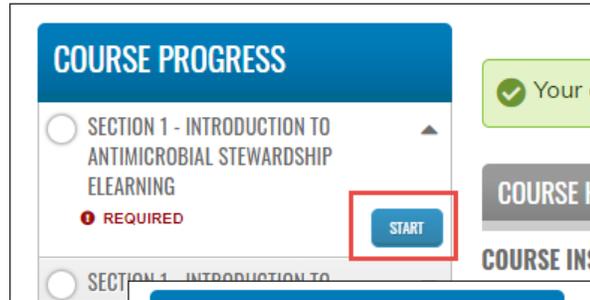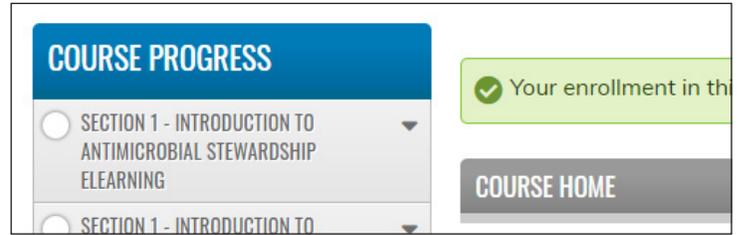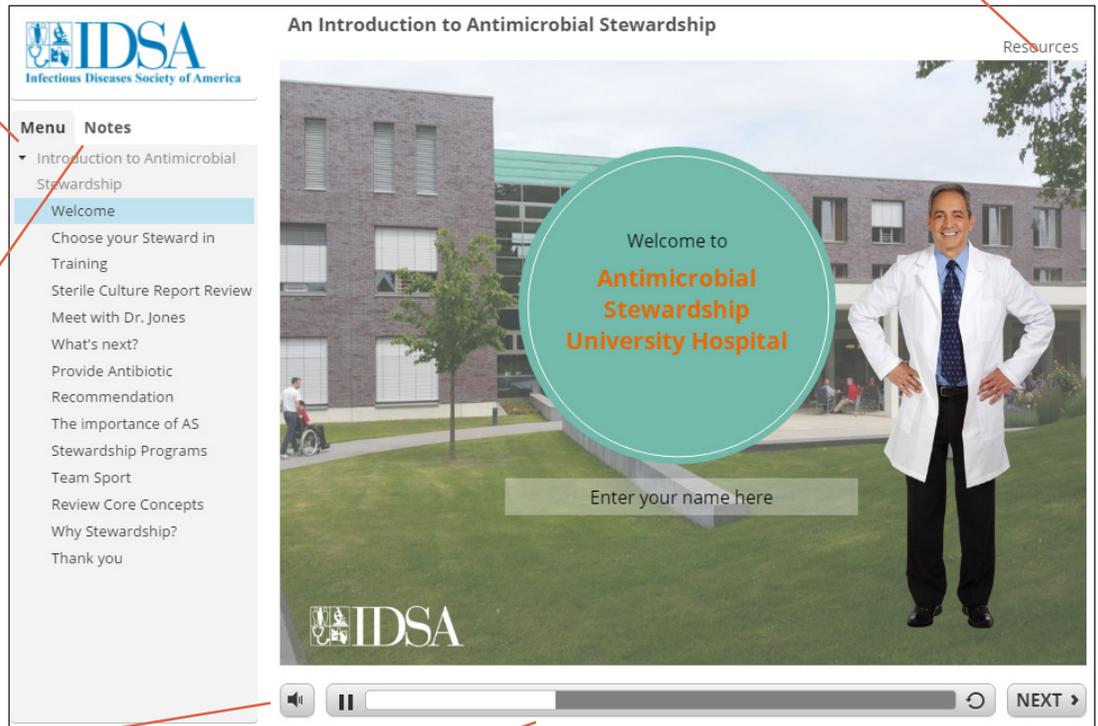
Understanding eLearning modules

Menu:
Displays the title of each slide on the left hand side

Resources:
Throughout the eLearning module, you may be prompted to click on the Resources button in the upper right hand corner. Resources contains various links to documents and other websites that can help to expand your knowledge.

Notes:
Perfect if you are unable to listen to the audio. You can read the audio "Notes" instead. **NOTE: For some slides, the notes will not change and you should read the text on the screen instead.**

An Introduction to Antimicrobial Stewardship

Resources

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Infectious Diseases Society of America

Menu   Notes

▼ Introduction to Antimicrobial Stewardship
Welcome
Choose your Steward in Training
Sterile Culture Report Review
Meet with Dr. Jones
What's next?
Provide Antibiotic Recommendation
The importance of AS
Stewardship Programs
Team Sport
Review Core Concepts
Why Stewardship?
Thank you

Welcome to
Antimicrobial Stewardship University Hospital

Enter your name here

IDSA

Volume:
Click here to adjust the sound volume

Scrollbar:
Use the scrollbar to stop and start throughout the module. Some slide layers cannot be paused and you should restart the entire slide to review.

Buttons:
Click "Next" and "Previous" to move forwards and backwards within the module. Some buttons will be found inside of the screen to proceed.

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Notes:

Tracking progress and receiving credit

To gain full CME/MOC Credit, all of the modules within this course must be completed in their entirety, including the pre and post surveys, in order for the learning management system to provide you with a certificate and credit at the end.

If you choose not to finish all of the sections, you can claim partial credit for the sections/modules you did complete.

Your progress should be visible throughout the curriculum.

Status	
① In progress	☑
✔ Complete	☑
◎ Enrolled	☑

Evaluation & Survey Components

In order to complete participation of the CAS Curriculum, the Evaluation team is conducting research to gather information about AS knowledge, attitudes, and practices in addition to basic demographic information and career interests.

You must complete the pre and post survey at the beginning and end of the curriculum in order to get full credit and receive yourcertificate.

The Evaluation goals are as follows:

Objective 1: To assess how Infectious Disease fellows' knowledge, attitudes, and practices regarding antimicrobial stewardship (AS) change as a result of the IDSA AS curriculum.

Objective 2: To explore how Infectious Disease fellows' attitudes towards a career in AS are impacted by the IDSA AS curriculum.

Objective 3: To identify barriers and facilitators to implementation of the IDSA AS curriculum at the program and individual level.

Objective 4: To determine if perceptions of programs' current AS curriculum differ between fellows, program directors, and AS champions.